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ABSTRACT

This 5-volume directory describes more than 1,000 discretionary grants and contracts supported by the Research to Practice Division of the Office of Special Education Programs. The projects are grouped into sections representing the seven program areas of the Individuals with Disabilities Education Act Amendments (1997), Part D. This volume, the fourth of the directory, describes projects concerned with technology and media services. These projects are intended to (1) support educational media activities designed to be of educational value to children with disabilities; (2) provide video descriptions, open captioning, or closed captioning of television programs, videos, or educational materials; (3) distribute captioned and described videos or educational materials; (4) provide free educational materials, including textbooks, in accessible media for visually impaired and print-disabled students in elementary, secondary, postsecondary, and graduate schools; and (5) provide cultural experiences through appropriate nonprofit organizations, such as the National Theater of the Deaf. The 148 projects are grouped by funding competitions and include grant number, title, project director, beginning and ending dates, and contact information. An abstract usually describes the project's purpose, proposed method, and proposed products. Four indexes are provided: a project director index, an organization index, a state index, and a subject index. (CR)

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DISCRETIONARY PROJECTS SUPPORTED BY
THE OFFICE OF SPECIAL EDUCATION PROGRAMS UNDER
THE *INDIVIDUALS WITH DISABILITIES EDUCATION ACT*
FISCAL YEAR 2000

TECHNOLOGY AND MEDIA SERVICES

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THE OFFICE OF SPECIAL EDUCATION PROGRAMS
UNDER THE *INDIVIDUALS WITH DISABILITIES EDUCATION ACT*

FISCAL YEAR 2000

TECHNOLOGY AND MEDIA SERVICES

PREPARED BY
RAYMOND ORKWIS, JUDI DECARME, AND JEANNE GLOVER
THE ERIC/OSEP SPECIAL PROJECT
ERIC CLEARINGHOUSE ON DISABILITIES AND GIFTED EDUCATION
THE COUNCIL FOR EXCEPTIONAL CHILDREN



U.S. DEPARTMENT OF EDUCATION
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TECHNOLOGY AND MEDIA SERVICES

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INTRODUCTION

This directory, which is presented in five separately published sections, describes over 1,000 discretionary grants and contracts supported by the Research to Practice Division of the Office of Special Education Programs, which administers the discretionary programs authorized by the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA). Some of the projects were funded under the provisions of the original IDEA, but for the purposes of this directory, they are grouped into five sections representing the seven program areas of the newly authorized IDEA, Part D:

- 1: **Research, Innovation and Evaluation** (which covers two programs: *Research and Innovation* and *Studies and Evaluations*)
- 2: **Personnel Preparation**
- 3: **Technical Assistance, Dissemination, and Parent Information** (which covers two programs: *Technical Assistance and Dissemination* and *Parent Training and Information*)
- 4: **Technology and Media Services**
- 5: **State Improvement**

This section of the directory, "Technology and Media Services," presents projects that aim to: (1) support educational media activities that are designed to be of educational value to children with disabilities; (2) provide video description, open captioning, or closed captioning of television programs, videos, or educational materials; (3) distribute captioned and described videos or educational materials; (4) provide free educational materials, including textbooks, in accessible media for visually impaired and print-disabled students in elementary, secondary, postsecondary, and graduate schools; and (5) provide cultural experiences through appropriate nonprofit organizations, such as the National Theatre of the Deaf.

Within this section of the directory, the projects are grouped by the competitions under which they were funded. Within each competition, the projects are arranged in order from the earliest to the most recent. Access to the project information is enhanced by several indexes, which include:

- Project Director Index
- Organization Index
- State Index
- Subject Index

84.026D
Educational Video Selection and Captioning

Grant Number: H026D970002

**Solicitation, Screening, Evaluation, Procurement, and
Captioning of Educational and Special Interest Videos**

Project Director: Stark, Bill
National Association of the Deaf
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Silver Spring, MD 20910
864-585-1788
Fax Number: 864-585-1791

Beginning Date: 10/01/97
Ending Date: 9/30/01

Purpose: The NAD will continue its program of screening, evaluating, captioning, and disseminating films and videos that provide enriched educational and cultural experiences for persons who are deaf and hard of hearing.

Method: The NAD will use its outreach program and capabilities in providing services for persons who are deaf and hard of hearing. Consumer input and careful monitoring of educational and technological innovations will permit the NAD to recommend appropriate adaptations to the Captioned Films/Videos (CFV) program to meet changing needs.

Products: This project is designed to generate increased usage of captioned titles made available through the CFV program and to meet the requirements of both changing needs and changing technologies as the CFV program advances into the next century.

84.327A

Steppingstones of Technology Innovation for Students with Disabilities

Grant Number: H327A990023

How to Handle It: Problem Solving in Social Situations

Project Director: Gut, Dianne M.; Doverspike, David

Beginning Date: 9/01/99

Ohio University

Ending Date: 8/31/01

Dept. of Education

105 Research & Technology Bldg.

Athens, OH 45701

740-593-0874

Fax Number: 740-593-0477

E-mail: gut@ohiou.edu

Purpose: This project will develop interactive technology for individual or group use that will improve the social problem-solving skills of middle school students with disabilities. The computer software developed by the project will help students to experience scenarios in a non-threatening environment and provide them practice with metacognitive social problem solving prior to experiencing the situation in real life settings.

Method: The social problem-solving program, available on CD-ROM and in other formats, will provide individual students with an opportunity to view a video segment dramatizing a social situation. Students will select solutions to each situation and view a dramatization involving their chosen selection. The program will include definitions of the target skills, practice scenarios to demonstrate appropriate social problem solving, interactive problem solving vignettes to allow students to practice social problem solving, and an evaluation component designed to keep track of appropriate and inappropriate responses to student-selected solutions.

Products: Once developed, the technology will be piloted in three schools, where approximately 150 students and six teachers will participate in the two-month test. After evaluation, the software will be incorporated as a multimedia component into a more comprehensive social skills curriculum to be developed. The software will be disseminated first to all participating schools, and then to all Ohio University Partnership schools and Pittsburgh schools for use in their classrooms.

Grant Number: H327A990024**VESL: Visual Education for Scientific Literacy***Project Director:* Brigham, Frederick J.; Watkins, Juanita J.*Beginning Date:* 1/01/00

University of Virginia

Ending Date: 12/31/01

Curry School of Education

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Charlottesville, VA 22906-9003

804-924-0767

Fax Number: 804-924-0747*E-mail:* brigham@virginia.edu

Purpose: This project is a systematic study of how students interact with technology. It will collect information on the actual behavior exhibited by students with and without learning disabilities and other mild disabilities while they are learning via use of World Wide Web sites. The project will be a collaborative effort among faculty in special education, science education, systems engineering, and the physical and life sciences.

Method: The project will examine the links between actual behaviors while students are using the Websites and educationally relevant outcome measures such as recall and application of content material. The project employs a sophisticated system for observing learner behaviors as represented by eye gaze data and will provide a clearer picture of what students actually do when presented with such displays as Websites.

Products: Once the characteristics of visual movement and digital display elements leading to recall/comprehension outcomes are determined, the next step will be the synthesis of information and development of model digital display documents which communicate science content and contain the elements determined to contribute to comprehension. From the study's conclusions, model Website applications will be developed for Website design which will enhance science comprehension for students with and without learning disabilities, K-12.

Grant Number: H327A990027**Evaluating the Use and Implementation of Anchored Instruction to Enhance the Literacy and Social Studies Skills of Mildly Disabled Learners***Project Director:* Kinzer, Charles; Rieth, Herbert*Beginning Date:* 9/01/99

Vanderbilt University

Ending Date: 8/31/01

512 Kirkland Hall

Nashville, TN 37240

615-322-8100

Fax Number: 615-322-8999*E-mail:* Charles.K.Kinzer@vanderbilt.edu; rieth.herb@mail.utexas.edu

Purpose: To reduce the extensive academic and social difficulties of junior high school students with mild disabilities, an interdisciplinary team from Peabody College of Vanderbilt University and the University of Texas at Austin, with expertise in the areas of multimedia technology, curriculum development, literacy, social studies, and instructing adolescent students with mild disabilities, will evaluate an instructional system that incorporates instructional anchors and related curriculum that have been demonstrated to be powerful interventions in the areas of literacy and social studies. This project will provide teachers with the knowledge and skills to create and implement an academic environment that incorporates "life lessons" in ways that will enhance students' planning, survival behavior skills, employment skills, and citizenship skills by incorporating authentic problem

situations into the subject-area curriculum through multimedia technology and the pedagogy of anchored instruction. This project uses knowledge gained from a previous Phase I project to test rigorously the effects of implementing the prior curriculum in ways that enhance teachers' understanding and impact their curriculum and, ultimately, student outcomes.

Method: The project will conduct the following activities: 1) rigorously field test, in eight classrooms in Nashville, Tennessee and Austin, Texas, anchored instructional interventions based on research findings from the areas of cognition and computer CD-ROM technology for students with mild disabilities; 2) provide teachers with the skills, knowledge, plans, and opportunities for reflection leading to curricular change and evaluate the fidelity of teachers' implementation of the instructional intervention and impact on student academic achievement and social behavior at the Nashville and Austin research sites; and 3) disseminate nationally via traditional and a World Wide Web-based information system the processes, products, and procedures that have been found most successful in enabling teachers working with students with mild disabilities in both general and special education settings to incorporate the technology and anchored instruction into their respective classrooms.

Products: Unique benefits of this research, development, and dissemination effort include: 1) national impact in improving teaching and learning in the targeted special education settings; and 2) the opportunity to rigorously test an instructional model and intervention that have been demonstrated to have high probability of success through a previously funded, pilot development effort.

Grant Number: H327A990029

**Improving Spelling in Non-Speaking Children with Developmental Disabilities
through VOCAs and Talking Word Processors**

Project Director: Schlosser, Ralf W.

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Beginning Date: 7/01/99

Ending Date: 6/30/01

Purpose: This Phase II project is concerned with evaluating the role of communication technology in promoting literacy in non-speaking students with developmental disabilities. A promising technology-based approach involving an innovative combination of voice output communication aids (VOCAs) or talking word processors and the copy-cover-compare method of spelling instruction will be evaluated. Compared to nonelectronic communication boards, VOCAs provide additional speech and print feedback for each letter and/or word entered. Compared to typical word processors, talking word processors provide additional speech feedback.

Method: In order to enable this technology-based approach to maximize spelling improvement it is essential to determine the feedback conditions that result in more effective and efficient spelling acquisition, maintenance, and generalization. In Part I of the project, the project staff will compare the effects of three feedback modes (Speech, Print, Speech + Print) for each letter and word entered. In the Speech condition, the student can hear letters/words via synthetic speech. In the Print condition, the student can see each letter/word on a visual display. In the Speech + Print condition, the student can see and hear letters/words. In Part 2, the project will examine the effects of two feedback levels (Word, Letter + Word). With word-level feedback, the student receives feedback only after the whole word is entered. With Letter + Word feedback, the student receives feedback for each letter entered and each word entered. Six non-speaking students with autism and six non-speaking

students with cerebral palsy will participate in Part 1. Six other non-speaking students with autism and six other students with cerebral palsy will participate in Part 2. The participants will be between nine and eleven years old and considered poor spellers. Novel words will be tested to evaluate generalization. Single-subject experimental designs (i.e., parallel treatment designs), replicated across students, will be used to evaluate the effects of feedback modes and feedback levels on spelling using five dependent measures. In addition to these objective data, the project will also determine the social significance of these outcomes as perceived by the participants' teachers/teacher aids, parents, and speech-language pathologists.

Products: This project will provide sound evidence as to what feedback modes and feedback levels maximize the effectiveness and efficiency of this technology-based approach in terms of spelling acquisition, maintenance, and generalization.

Grant Number: H327A990036

TELE-Web: Technology Enhanced Learning Environments on the Web

Project Director: Englert, Carol Sue; Zhao, Yong
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Beginning Date: 8/16/99
Ending Date: 8/15/01

Purpose: The project's primary goal will be the description, modification, and evaluation of research-based literacy practices that have been incorporated into a technology application, Technology Enhanced Learning Environments on the Web (TELE-Web). TELE-Web is a suite of Internet-based software designed to accelerate and scaffold the literacy learning of students with disabilities in the core academic subjects (reading, writing, social studies, or science). TELE-Web offers multiple levels of support for teachers and students, including: 1) text-speech functions; 2) drawing functions; 3) a spelling program; 4) writing and publishing programs; 5) mapping functions; 6) software to promote the development of word recognition, phonemic awareness, and comprehension; and 7) book chat rooms. All of the TELE-Web environments can be customized for a specific child, literacy goal, or curriculum, enhancing its developmental appropriateness for different contexts and learners. This project will continue refining this Internet-based software through a contextually responsive process of curriculum development and implementation in collaboration with the project's school partners to ensure that activities are calibrated to the special and general education curriculum, as well as aligned to the age and developmental abilities of students, especially those with learning/behavioral disabilities, mental impairments, or developmental delays (LBD/DD).

Method: The participants implementing the TELE-Web curriculum will include eight general education teachers (four lower-elementary, four upper-elementary) and four resource room teachers, as well as their 160 general education students and 60 students with LBD/DD. A comparison group will be formed, and students in the two groups will be compared on a number of dependent variables, including their reading and writing performance, performance on standards-based assessments, social skills, and strategy knowledge/performance. Teachers will be contrasted on their use of technology, literacy practices, and effects of their curricular practices on students with LBD/DD. A longitudinal study will be conducted to determine the efficacy of the two conditions in terms of their potential to accelerate literacy achievement.

Products: TELE-Web can be easily and widely disseminated on the World Wide Web to teachers, students, researchers, and teacher educators in distant locations. By maintaining a Professional Development Network associated with TELE-Web, the project hopes to support the dual goals of providing professional development

related to literacy and technology, as well as furthering project dissemination. Descriptions of the project, position papers, and research reports will be written. Publication will be pursued as well as presentation of findings at national and state conferences.

Grant Number: H327A990040

**Effectiveness of the UKAT Functional Approach to
Assistive Technology Service Delivery: Phase II**

Project Director: Lahm, Elizabeth; Bausch, Margaret; Bell, Jennifer

Beginning Date: 7/01/99

University of Kentucky

Ending Date: 6/30/01

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Purpose: The purpose of this Phase II Steppingstones project is to examine the effectiveness of implementing a functional approach to guide the delivery of assistive technology (AT) services in schools. The goal is to test the effectiveness of several AT planning and implementation tools that were developed and pilot tested in an urban school district under a previously funded federal grant. Those tools include: AT planning guidelines, an AT screening instrument, an AT consideration system, AT training materials, an AT World Wide Web-based support system, and procedures for evaluating the impact of AT services.

Method: The effectiveness of the AT tools will be evaluated and combined into a single, exportable package called the University of Kentucky Assistive Technology (UKAT) Toolkit. The UKAT Toolkit will be implemented in six urban and rural school districts to determine its effectiveness in addressing the assistive technology mandates of the Individuals with Disabilities Education Act. The UKAT Toolkit is based on a model of human function which focuses on identification of demands that are placed on an individual from the environment and the functional responses that are required to respond to those demands. Quantitative and qualitative research methods will be used to determine the effectiveness of the UKAT Toolkit in guiding the planning and delivery of AT services to students with disabilities in both urban and rural school settings.

Products: The UKAT Toolkit will be developed and will be suitable for further large scale validation via Phase III of Steppingstones.

Grant Number: H327A990041

**Utilizing Technology to Remediate Auditory Processing Deficits:
A Comparison of Three Programs**

Project Director: Pokorni, Judith
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Beginning Date: 8/01/99
Ending Date: 7/31/01

Purpose: The purpose of this project is to test the relative effectiveness and cost/benefits of three remedial programs when incorporated into a local school system's special education programming.

Method: Sixty students (ages 8-9) with phonological processing difficulties will be assigned to one of three intervention groups: Lindamood LiPS, Fast ForWord, and Earobics. While phonological awareness is directly addressed by these interventions, it is essential that effective special education programming result in development of functional skills such as reading and language. Therefore, a baseline assessment of students will include measures of phonological awareness, reading, and language skills. Students will again be tested at one, eight, and twelve months post intervention. Data will be analyzed using ANOVA and a repeated measures design. Cost/benefits will also be analyzed for the three programs.

Products: During the second half of the project, staff will disseminate findings through conference presentations, the World Wide Web, and journal articles.

Grant Number: H327A990049

**Project DEVISE: Designing Environments for
Virtual Immersive Science Education**

Project Director: Behrmann, Michael; Chen, Jim; Dede, Chris; Sprague, Debra
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Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: This project will build immersive multi-sensory virtual learning environments that address the foundations of physics instruction for students with learning disabilities.

Method: The project will design and test prototype immersive virtual reality (VR) environments for high school students with learning disabilities. These learning environments will operate on Windows NT computers, which are affordable for and widely available in schools. The project will focus on two areas of science instruction: classical mechanics and electricity and magnetism. These two focus areas will be directly tied to current national and state standards of learning for science instruction.

Products: Three prototypes of direct instructional components of the virtual learning environments will be developed and field-tested by the project. An instructional model for the VR components will also be developed and tested. Ongoing learning from the project will be disseminated throughout the state of Virginia and integrated into statewide technical assistance activities. National impact will result from dissemination activities, including national, state, and local presentations, journal publications, and involvement with the Department of Education resource site.

Grant Number: H327A990050

**Navigating Knowledge: Studying the Effectiveness of Integrating
the Knowledge Navigator into an Active Research Curriculum**

Project Director: Corley, Patricia
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E-mail: PCorley@edc.org

Beginning Date: 1/01/00

Ending Date: 12/31/01

Purpose: This project will conduct a rigorous field-based research study to determine whether integrating the Knowledge Navigator, a software-based tool, into an active research curriculum through ongoing professional development has a positive impact on learning outcomes for middle school students and teachers.

Method: Seventh-grade social studies teachers will collaborate with researchers in designing, implementing, and reflecting on an active research curriculum that strategically integrates the Knowledge Navigator (the intervention). Researchers will employ a quasi-experimental design to evaluate the impact of this approach on learning outcomes among seventh-grade students with and without disabilities and their teachers. Teachers in the control condition will also engage in professional development and carry out an active research curriculum, though they will not utilize the Knowledge Navigator. The project will employ both qualitative and quantitative data-gathering strategies that include, for example, gathering student work at regularly identified intervals within the research process, interviewing teachers and students, making classroom observations, and tracking use of Knowledge Navigator. The project will also use linear growth modeling techniques to explore student and teacher growth throughout the process.

Products: This study will result in a better articulation of the benefits and limitations of the Knowledge Navigator software tool and development of a set of professional development materials to accompany the product.

Grant Number: H327A990057

**Project PRIIDE: Providing Resources through
Interactive Instruction in Deaf-Blind Education**

Project Director: Alsop, Linda
Utah State University
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Logan, UT 84322-1415
435-797-1172
Fax Number: 435-797-2019
E-mail: lalsop@cc.usu.edu

Beginning Date: 7/01/99
Ending Date: 6/30/01

Purpose: Project PRIIDE, under Phase I - Development Plan, will develop a technology-based approach for improving access to and participation in the general curriculum and other activities for children and youth who are deaf-blind. This technology-based approach will combine new technology, curriculum materials, and instructional methodologies that will support the achievement of education purposes of these children.

Method: For children and youth who are deaf-blind, access to the general curriculum and other activities is limited unless accommodations and modifications are made that will link them to the world. Project PRIIDE will address this need by developing an interactive program, using DVD (Digital Versatile Disc) technology, which can be used by teachers, related service providers, paraprofessionals, and families. It will be designed to guide the user through problem solving and decision making regarding accommodations and modifications that are appropriate in programs for these children and youth in various educational settings. DVD technology will allow this program to be used with DVD players or on a computer that can be linked to a World Wide Web site. Feasibility testing will be conducted in the states of Utah and Minnesota.

Products: This project will develop a DVD-based interactive program that will assist in making decisions about appropriate accommodations for children with deaf-blindness.

Grant Number: H327A990074

Project I LIKE: Improve Literacy by Interacting with Kitten and Elephant

Project Director: Dowrick, Peter; Kim-Rupnow, Weol Soon
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Website: <http://www.cds.hawaii.edu>

Beginning Date: 9/01/99
Ending Date: 8/31/01

Purpose: This project will develop and evaluate a multimedia-based package called I LIKE: Improve Literacy by Interacting with "Kitten" and "Elephant," who are animal friends that will guide and encourage learners in a multimedia reading environment, to improve literacy-related skills for elementary students with disabilities.

Method: This project is a collaboration among The Center on Disabilities Studies University Affiliated Program at the University of Hawaii, the University of Pennsylvania, and the Marshall Islands Department of Education. Major activities during the first year of this 2-year project will include: 1) developing the I LIKE package

through extended pilot testing with students in elementary school; and 2) providing intensive training on the use of the I LIKE package to collaborating teachers and community members. This project will improve the student-to-tutor ratio by at least 300% with the addition of computer-assisted passage reading, sight word recognition, and phonemic skills. The key innovative feature is a program that can automatically create audio feed-forward to teach reading skills and to boost the student's motivation and effort by listening to him/herself reading fluently. In the second year, a series of field tests by trained teachers and community members at three diverse schools will be conducted to evaluate and further improve the I LIKE package and its literacy outcomes for students with disabilities. Both qualitative and quantitative data will be collected on such dependent variables as: 1) students' reading skills of phonological awareness, decoding, word recognition, fluency, comprehension, motivation, and self-perceived competency; and 2) changes in teachers' and community members' knowledge and practices related to literacy incorporated as part of general classroom instruction. The project will also conduct case studies to investigate what media work best in what context and with what types of disabilities.

Products: The project will develop a multimedia literacy education package and training materials to explain its use. Package evaluation findings will be shared widely through the World Wide Web, replication packages, multimedia presentations, and journal articles.

Grant Number: H327A990078

ECCTS III: The Early Childhood Comprehensive Technology System

Project Director: Hutinger, Patricia L.; Johanson, Joyce

Beginning Date: 10/01/99

Western Illinois University

Ending Date: 9/30/02

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Macomb, IL 61455-1390

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Purpose: The major goals of this project are to: 1) disseminate information related to this project; 2) replicate and validate the original Early Childhood Comprehensive Technology System (ECCTS) II research findings in a range of typical rural and urban education settings; and 3) study implementation and maintenance of the project in replication sites. ECCTS III will study the effectiveness ECCTS II is likely to have in sustained use, focusing on factors related to children, families, professional staff, access to the regular curriculum, and policy.

Method: The major objectives of ECCTS III include tasks related to dissemination, replication, product development, and project management. Each objective incorporates data collection, analysis, and evaluation of tasks. Both quantitative and qualitative measures will be used for evaluation. Project staff will provide replication sites with ongoing staff development training and support for teachers, professional staff, and Technology Teams (Tech Teams). The on-site Tech Teams will be trained to provide continuing support and staff development at each site and will themselves receive continuing support from ECCTS III staff. Two groups of educational programs (Special Education Cooperatives and Joint Agreements, and other related agencies) will participate in partnerships with ECCTS staff: Group 1 will have five sites and Group 2 will have four sites. Group 1 sites will receive more on-site training from the ECCTS III team than Group 2 sites, thereby providing a means to test conditions needed to establish and maintain ECCTS. Group 1 sites' activities will be modeled on the on-site tasks identified in ECCTS II during the collaborative research association between Kids). Group 2 sites' training will be modeled on an Outreach Replication model used successfully by Macomb Projects. Both Group 1 and 2 sites will receive continuous follow-up and support from the ECCTS III team because the research phase demonstrated the need for a long-term support period. Follow-up training and consultation will occur on-site as well as by e-mail, phone, videotape exchange, World Wide Web-site discussion, and return visits to the Macomb project

site. During the third year, maintenance of the system will be supported and studied, with a maximum of two new Group 2 sites added.

Products: Dissemination activities will include traditional methods and media including face-to-face presentations, written materials, television, videotape, and strategies made possible by Web site and Internet capabilities. Target audiences will be identified so that efforts can be focused specifically at school boards, administrators, State Departments of Education, teachers, support staff, families, consumers, legislators, and others. A Web site home page will be developed and maintained. Product development will include a detailed blueprint for further dissemination and implementation of the system as well as videotapes and staff development modules targeted at the groups cited above.

Grant Number: H327A990081

**Field-Testing & Validation of a Computer Assisted Testing Procedure for the
Transition Competence Battery**

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Beginning Date: 10/01/99

Ending Date: 9/30/01

Purpose: The purpose of this Phase II project is to: 1) field-test the CAT-TCB, a computerized assistive testing version of the Transition Competence Battery for Deaf Adolescents and Young Adults, and 2) establish its reliability and validity.

Method: An extensive field-testing of the CAT-TCB in order to establish the instrument's psychometric characteristics, and three studies to examine its test-retest reliability and validity will be conducted. The CAT-TCB requires rigorous field-testing to address the following psychometric characteristics before it can be released for consumer use: 1) reliability with respect to item and test information functions; 2) test validity in terms of unidimensionality and item local independence along with concurrent and discriminant validity; 3) item and total test appropriateness/bias; and 4) optimal standards for test termination and test score interpretation. Score interpretation will depend on the validation of mastery cutscores — i.e., criteria that separate "skilled" from "unskilled" performers. The prototyped hardware/software configurations must be tested further, as the application reaches a broad range of user situations. Two related research questions will be addressed in this project: 1) what are the psychometric characteristics of the CAT-TCB?, and 2) what standards should be used on the CAT-TCB to guide transition planning and service delivery?.

Products: A psychometrically sound and useable CAT-TCB will provide information that ultimately will improve the transition outcomes of students who are deaf. Presentations will be made at professional conferences. Dissemination will occur to persons who are deaf, blind, and deaf-blind. Publications, technical reports, and a project newsletter will be produced.

Grant Number: H327A990082

**Improving Literacy Outcomes Using Captioning Television
and Parental Coviewing and Tutoring Strategies**

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Beginning Date: 8/01/99

Ending Date: 7/31/01

Purpose: This Phase 2 Research and Evaluation project will adapt and refine the use of captioned programs to improve literacy for beginning readers, adapt and refine an instructional methodology for parents to use in their homes while co-viewing captioned videos with their children, and evaluate captioned programs and parental co-viewing and tutoring strategies in combination.

Method: The project will address research questions related to the effect of captioned programs on improving literacy outcomes and reading skills. The project will build on past successes of captioning technology related to parental co-viewing and literacy outcomes. Knowledge of what criteria are important in program selection and what parental co-viewing and tutoring strategies work will contribute to the development of the field-based evaluation in Year 2. This evaluation, in turn, will provide evidence of the effectiveness of captioned programs and parental co-viewing and tutoring strategies for improving literacy for children who are deaf and hard of hearing, as well as two other groups: poor children and children with limited English proficiency—two groups at risk for, and more often identified with, disabilities such as learning disabilities, developmental delays, and language impairments.

Products: End products include evidence that captioned videos and parent co-viewing/tutoring strategies help poor children who are at-risk for or identified with reading difficulties and children who are learning English as a second language. Materials and procedures for parents and educators will outline the co-viewing approach and method of program selection.

Grant Number: H327A990100

**Development and Refinement of Personal Caption Display System Using
Continuous Speech-to-Caption Technology for Students Who Are Deaf**

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Beginning Date: 7/01/99

Ending Date: 6/30/01

Purpose: This project will develop and refine a personal caption display system that can be used in the classroom by students who are deaf or hard-of-hearing, and will test the feasibility of using speech recognition software to produce and display "real-time" captions of orally presented instruction.

Method: The project will work in partnership with MicroOptical Corporation of Boston, MA and Personal Captioning Systems, LLC, of Chicago, IL. The project will complete the development and refinement of an advanced prototype of the personal caption display (PCD) glasses that is suitable for use in the classroom by students who are deaf or hard-of-hearing. Testing will be completed on the application of commercially available continuous speech recognition software as a means for producing "real-time" captions of oral presentations in the classroom, such as teachers' lectures. The project will test the PCD system in the classroom with captions generated by computer as a means for deaf students to simultaneously receive a captioned version of the oral presentation while watching the speaker, enabling these students to participate more fully in the classroom.

Products: The PCD technology developed and refined by this project will address the problems of support for deaf students in general education classes. The availability of this technology will mean that deaf students will receive aural information on a nearly equal basis with hearing students. The PCD device will also lower the costs and labor needed for interpreting lectures and other orally presented materials.

Grant Number: H327A000005
The KidTools Support System

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Beginning Date: 1/01/00
Ending Date: 12/31/02

Purpose: This project will develop and test performance support software for children to enhance their school survival skills through the use of computer tools. The software will include a library of tools provided as easy-to-use templates for children, ages 7-13, to personalize and use in school and at home by identifying behaviors and skills, developing implementation strategies, preparing metacognitive cues, and printing self-monitoring cards.

Method: The KidTools Support System developed by the project will include: two software tool programs for children (elementary and middle school levels); a hypermedia database of information on the tool strategies and resources for educators and parents; an orientation module with introductory material and video demonstrations; and a website containing interactive versions of the information database, links to resources, software, and discussion lists for users. An iterative process of software development, testing, and refinement will be used with involvement of various groups throughout the project.

Products: The software will include tools for self management, time management, study skills, and organizational skills. Following development, the project will disseminate the materials and test results while undertaking impact research.

Grant Number: H327A000014

Project STATUS - Phase 2

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Beginning Date: 8/01/00

Ending Date: 7/30/02

Purpose: Project STATUS (Student Technology Assessment Through Unique Strategies) Phase 2 will subject the findings of Phase 1 to rigorous field-based research and evaluation to validate the effectiveness and process for use of videoconference technologies to provide rural areas with access to assistive technology (AT) assessment and services.

Method: Videoconference technology is a viable and effective medium for a variety of purposes, including providing local school personnel in remote or dispersed locations with access to assistive technology assessment, training, and technical assistance. Phase 1 of Project STATUS addressed the critical need for access to assistive technology assessment and services through the use of videoconference strategies. Using this technology-based approach, children in even the most rural parts of the state have been given access to qualified AT professionals. During Phase 1, Project STATUS organized and conceptualized how assistive technology assessment and services could be provided utilizing videoconference technology. Phase 2 will refine and validate the findings. Phase 2 will investigate seven aspects of using videoconferencing for assistive technology assessments and services: 1) validation of the quality of AT assessment reports; 2) delineation of specific procedures and protocols for the use of videoconference technologies to provide direct services; 3) role of videoconference technologies in providing comprehensive AT services; 4) collection and analyses of student impact data; 5) determination of the effectiveness of the use of videoconference technologies for follow-along services; 6) analysis of the cost effectiveness of the provision of AT services utilizing videoconference technologies; and 7) identification and testing of the utility of new or improved forms of videoconference technology for conducting AT assessments.

Products: This project will develop the potential of increased access to AT services for innumerable children. The same technology can then be applied to an extensive number of other specialized services, such as occupational and physical therapy, speech therapy, mental health services, or even nursing services. Many specialized services that are currently tied to staff or separate settings could then be brought to children in their less restrictive home school environment.

Grant Number: H327A000020**Learning to Drive a Wheelchair over the Internet:
A Phase II Steppingstones Project**

Project Director: Inman, Dean
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Beginning Date: 10/01/00
Ending Date: 9/30/02

Purpose: This project will investigate the effectiveness of using virtual reality to help children learn to drive a motorized wheelchair, thus gaining functional skills which transfer or generalize to the natural environment.

Method: The project will update the successful network-based approach for teaching orthopedically impaired children to drive motorized wheelchairs safely in the natural environment. Upgraded software using newer technology will provide better and more realistic graphics, will eliminate the need for a head-mounted display, and will allow two or more participants to enter the same virtual world to interact both visually and by voice while they move through that environment. Rigorous field-based research and evaluation will determine the intervention's effectiveness in educational settings.

Products: The project will develop a tutorial and training program for use at other locations. A CD-ROM version of the training program will be developed and disseminated to enable non-network users to train by themselves. Dissemination efforts will be made to work toward implementation of the procedures in interested school districts.

Grant Number: H327A000023**Development and Refinement of Web-Based Tools**

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Beginning Date: 9/01/00
Ending Date: 8/31/02

Purpose: This project will develop and evaluate a comprehensive set of web-based tools for helping special education teachers select continuous progress measures for their students; manage the data that come from implementation of those measures; and collaborate with parents, peers, and consultants on the analysis of existing intervention programs and the development of revised intervention features. This project will produce three integrated, web-based services for teachers of infants and toddlers, preschoolers, and elementary-age students with disabilities.

Method: The project will use three significant technologies to improve outcomes for infants, toddlers, preschoolers, and elementary students with disabilities: 1) proven continuous progress monitoring procedures developed by the investigators of the project; 2) established software programs for creating a web-based presence for teachers using these measures; and 3) collaborative computing, knowledge management, and universal user interface design to produce a resource that helps teachers do easily what they previously were unable to do.

Products: The web-based services developed by this project will give teachers access to: assessment formats, stimulus materials, and guidelines for using continuous-progress measures; secure, easy-to-use resources for recording assessment data and for generating reports of individual children's development and achievement; and resources for sharing data and generating ideas for further assessment and intervention among teachers, parents, school-district personnel, and national consultants.

Grant Number: H327A000027

Project INTERSECT: Internet Texts with Electronic Resources, Supportive Enhancements, and Comprehension Tools (Phase 2)

Project Director: Anderson-Inman, Lynne; Horney, Mark A.

Beginning Date: 10/01/00

University of Oregon

Ending Date: 9/30/02

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Purpose: The inability of many students with disabilities to comprehend the text materials assigned by teachers has a negative impact on their literacy skills, their abilities to succeed academically in general education courses, and their chances of performing successfully on tests reflecting local, state, and national curriculum standards. The goals of Project INTERSECT (Internet Texts with Electronic Resources, Supportive Enhancements, and Comprehension Tools) are to improve the literacy of secondary students with reading and/or learning disabilities, increase their success in the general education curriculum, and enhance their participation in educational reform through the creation and distribution of World Wide Web-based digital texts specifically designed to meet their comprehension and information acquisition needs.

Method: To accomplish these goals, Project INTERSECT (Phase 2) has adopted three objectives: 1) to measure and describe the impact of World Wide Web-based, "supported-text" materials on the literacy skills and academic achievement of secondary-level at-risk readers; 2) to increase the understanding of which students, teachers, and learning environments are most likely to benefit from use of World Wide Web-based, "supported-text" materials; and 3) to improve the design and construction of future World Wide Web-based "supported-text" materials by using evaluation data to inform the principles and criteria recommended to the field.

Products: Information gathering during Phase 2 will be used to improve texts in the INTERSECT library, and will provide guidance to the field on effective design principles for online digital texts meeting the needs of students with reading/learning disabilities. Phase 2 is also designed to identify the characteristics of teachers, students, and learning environments where use of online reading materials, supported with embedded resources, are effective for promoting school success.

Grant Number: H327A000034**Basics: Baby Awareness and Support through Interactive Computer Systems***Project Director:* Sampers, Jackie L.*Beginning Date:* 7/01/00

University of Kentucky

Ending Date: 6/30/02

University Research Foundation

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Purpose: This project responds to the needs of multi-risk families who have hospitalized infants with established or significant risk conditions due to biological insult or syndromes that result in developmental delay. The project will provide information via an interactive computer system (ICS) that allows for multimodal access with the goal of supporting the safe transition of the infant into community-based services with supported referral and printed materials that can be given to the family or early childhood professional.

Method: The project will develop five ICS packages using formative evaluation, including review, focus groups, and service providers. All packages will be activated using touchscreen technology and will have voice-over in English and Spanish. Captioned text will accommodate hearing-impaired individuals and touch areas will accommodate persons with motor impairments.

Products: The project will develop five ICS packages: 1) a package that contains a sequence of pictures that follows the development of the premature infant, provides information on ways of handling infants that support development, and directs families to resources in the hospital and the state, as well as to national organizations; 2) a community service package that will introduce families to the Kentucky Early Intervention System; 3) a package that introduces families to the health-care professionals taking care of the baby; 4) a package for siblings that teaches about the new baby in their family; and 5) a package that provides a walk through a virtual garden for families to take a break from the intensity of the hospital unit.

Grant Number: H327A000035**Monitoring Authentic Problem Solving: MAPS to Enhance
Outcomes for Students with Disabilities: Phase 2***Project Director:* Fuchs, Lynn; Fuchs, Doug*Beginning Date:* 10/01/00

Vanderbilt University

Ending Date: 9/30/02

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Purpose: Based on a multimedia assessment system, MAPS (Monitoring Authentic Problem Solving) helps students with disabilities overcome barriers relating to strategies for applying skills to solving mathematical problems using real-life situations, strategies which are often used as a basis for student assessment. Students with disabilities typically have not developed good strategies for applying such skills yet must participate in state accountability programs, most of which use text-based presentation and response formats.

Method: The MAPS system assists students by relying on multimedia presentations of mathematical problem-solving situations and response formats, which avoid text and which more accurately estimate problem-solving capacity for students with disabilities. MAPS automatically scores and interprets problem-solving performances and provides ongoing student feedback as well as producing teaching recommendations matched to individual needs. To ensure that MAPS promotes its intended outcomes, rigorous field-based experimental studies will be conducted to identify which components account for the effectiveness of the outcomes.

Products: The project will produce a manual that teachers can use to implement MAPS, a corresponding video to help teachers understand the system and to advertise the availability of the system and its benefits, and a brochure that also advertises the availability of the system. The project will work with an educational publisher to market the system and make presentations about MAPS to ensure widespread dissemination.

Grant Number: H327A000036

Disseminating and Replicating an Effective Emerging Literacy Technology Curriculum: ELiTeC

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Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: This project, ELiTeC (Emerging Literacy Technology Curriculum), will disseminate information related to the development of the curriculum, replicate and validate the project's research findings in a range of typical rural and urban educational settings, and study implementation and maintenance at replication sites. The project is based on prior effective early childhood models for technology curricular integration.

Method: Three groups of multiple, complex sites, both rural and urban, will be used in the model development. The first site will receive more on-site training and follow up from the ELiTeC team than the second group, providing a means to test the conditions needed to establish and maintain the curriculum. Sites in the second group will be modeled on an outreach model used successfully for 21 years. The third group's sites will be studied to determine teacher modifications and the conditions necessary for maintenance. Project staff will provide replication sites with ongoing staff development training and support for teachers, professional staff, and families. Follow-up training and consultations will occur on-site, by e-mail, phone, videotape exchange, and on the project's web site.

Products: Dissemination will be done via face-to-face presentations, publications, television, videotape, and web site. Targeted audiences will include school boards, administrators, state departments of education, teachers, support staff, families, consumers, and legislators. A detailed blueprint for further dissemination and implementation of the model will be developed, in addition to videotapes and development modules.

Grant Number: H327A000038

**ClassWide Peer Tutoring-Learning Management System (CWPT-LMS) Technology
Supporting Literacy, Accountability and Access to General Education
Curriculum—Phase 3—Implementation and Validation Research Project**

Project Director: Greenwood, Charles

Beginning Date: 8/01/00

University of Kansas - Lawrence

Ending Date: 7/31/03

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Purpose: Phase Three of this project will investigate the implementation of the ClassWide Peer Tutoring-Learning Management System (CWPT-LMS) in multiple, complex settings and evaluate contexts within which it may be effectively used and sustained in local elementary schools. Based on a multi-level, ecological-interaction framework for investigating contextual factors, both a national urban and a regional rural investigation will be conducted.

Method: A total of 22 elementary schools (14 urban, 8 rural) will participate (22 principals, 280 teachers, and 8,500 students — 980 students with disabilities in all). A delayed, control-group design with case studies will control rival hypotheses and illuminate individual cases. This design is acceptable to teachers because all eventually use the CWPT-LMS, as the control group becomes an experimental group one year later. Schools will be randomly assigned to treatment. Investigated are use in geographically, ethnically diverse urban and rural schools, diverse hardware platforms, and diverse general education curricula. Classroom teachers, parents of children with disabilities, and persons with disabilities will participate in the planning, design, and evaluation.

Products: The primary outcome will be a "blueprint" to be used in dissemination and utilization of the CWPT-LMS approach. The completed dissemination "blueprint" will consist of Core Components; Support Components; and Replication Components. Another outcome will be new information on the contextual factors that either promote or hinder utilization. Impact data will be collected yearly to determine student outcomes, quality of implementation, level of teacher use and participation, consumer satisfaction, and the adaptations made to the model in rural, suburban, and urban elementary schools. Of primary importance will be large-scale demonstration of the successful linkage of technology components to curriculum and progress monitoring in ways that encourage effectiveness, usability, and accessibility.

Grant Number: H327A000040

**Implementing Curriculum-Based Standards for Students
with Disabilities via Online Instruction**

Project Director: Meyen, Edward; Deshler, Donald; Smith, Sean
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Beginning Date: 8/01/00
Ending Date: 7/31/02

Purpose: This project will use web-based instructional technologies to deliver exemplary modules for instructing students with disabilities on national curriculum standards. The project will adapt an online instructional model developed by the Online Academy at the University of Kansas to develop the modules.

Method: The project will engage national experts in determining which national curriculum standards or frameworks potentially have the greatest impact on the education of students with disabilities. Those standards will be translated into online instructional modules and made available nationally. Further, involvement of state education agencies and institutions of higher education will be sought to engage practicing professionals and preservice programs in implementing the online modules, educating not only the students but also those who teach them.

Products: The module design will include: 1) a template model with student activities; 2) an electronic instructional management system; and 3) an electronic portfolio for use by teaching professionals in building a record of professional growth and accountability.

Grant Number: H327A000041

Kids Learning in Computer Klubhouses (KLICK!)

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Beginning Date: 10/01/00
Ending Date: 9/30/02

Purpose: The project's primary goal will be the development, description, modification, and evaluation of the feasibility of a successful after-school clubhouse known as KLICK! (Kids Learning In Computer Klubhouses). The clubhouse is designed to offer engaging, authentic, and technology-rich activities to students with disabilities in urban, suburban, and rural settings.

Method: In the KLICK! clubhouses, students will engage in project-based learning activities that will promote their literacy, communication, collaboration, and academic skills, and they will design projects that use various technology applications that are useful to the school and the broader community. The KLICK! methodology will be developed through a series of design experiments to meet the needs of students with disabilities and to help them become more active participants in their education and community.

Products: Descriptions of the project, position papers, and research reports will be written by the co-principal investigators, and a web site containing project artifacts will be maintained at the clubhouse. The clubhouse will be linked to the College of Education homepage and a strong attempt will be made to publish the project artifacts to reach a wider audience within the field of education. The investigators will pursue presentation of their findings at national and state conferences as well.

Grant Number: H327A000044

**The FORUM Projects: A Partnership of Gallaudet University and Local School
Programs to Use Emerging Technologies to Bridge Barriers**

Project Director: Kluwin, Thomas; Gerner de Garcia, Barbara

Beginning Date: 10/01/00

Gallaudet University

Ending Date: 9/30/02

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Purpose: This project will train teachers of the deaf to integrate technology in their thinking about teaching, rather than as an "add on" problem to be solved. It will also train teachers of the deaf and regular education teachers to use technology as a device to overcome the barriers between deaf or hard-of-hearing children and their classmates as well as the world around them.

Method: Teachers will be trained in the summer months at five locations around the United States to integrate technology into their teaching and to prepare preliminary projects which will eventually be posted on the project's web site. During the school year teachers will receive consulting support from the project team as they refine their ideas and develop more elaborate projects to support the education of deaf children in their public school programs.

Products: The project will create web libraries, electronic pen pals, and virtual discussion groups, and will integrate other forms of technology as resources for teachers of the deaf and deaf students who do not participate directly in the project. Through these interactive media, teachers will be able to create virtual and inclusive classrooms from multiple locations, and they will be able to share ideas and solutions to problems. Eventually, the project hopes, through these methods, to create a virtual deaf community online.

Grant Number: H327A000045

The "E-description" Project: Extended, Enhanced, and Educational Descriptions

Project Director: Ely, Richard
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Beginning Date: 9/01/00
Ending Date: 8/31/02

Purpose: This project will develop and evaluate a new audio description methodology—"E-description"—specifically designed to provide access to and improve the educational impact of curriculum materials.

Method: The CPB/WGBH National Center for Accessible Media (NCAM) will adapt broadcast description methodologies for use with classroom media to improve blind students' access to and participation in curricula. Descriptive Video Service (DVS) was developed by WGBH and launched over the Public Broadcasting Service (PBS) in 1990 to make television broadcasts and movies on video accessible to people who are blind and visually impaired. The service allows viewers to hear carefully crafted, concise descriptions of key visual elements (actions, settings, facial expressions, graphics) along with a program's or movie's dialogue. The development of the methodology for "E-description" will build on current research on cognition in blind children. Working with a team of advisors, NCAM will explore the potential of description to help children understand curriculum materials and maximize learning.

Products: Project results will serve all blind children but will most notably address challenges faced by mainstreamed blind students and general education teachers.

Grant Number: H327A000056

Interactive Technology for Generalizing Literacy, Mobility and Purchasing Skills to Community Settings

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Beginning Date: 7/01/00
Ending Date: 6/30/02

Purpose: The primary objective of Project SHOP is to create an engaging, interactive video-based instructional CD-ROM that will later be used to teach functional community skills to students with moderate to severe disabilities.

Method: Activities for the first year of the project will focus on video design and production. Second year activities will focus on developing and evaluating the CD-ROM. Up to ten individuals with disabilities will work as project interns, and individuals with disabilities will be hired as actors for the video sequences. The CD-ROM will consist of ten-minute interactive instructional episodes, one each in the skill areas of 1) employment; 2) functional literacy; 3) mobility; and 4) purchasing. Social skills (e.g., appropriate interactions with shoppers and employees) and safety skills (e.g., appropriate responding to dangerous areas of the store) will be embedded in all episodes. Episodes will show engaging stories of individuals' with disabilities experiences in a community

supermarket. The stories will include a series of decision points and will include a preliminary assessment of generalization of skills to a community grocery store.

Products: The project participants who will be involved in the formative evaluation of the CD-ROM include parents, students with disabilities, and their teachers. Three expert consultants will also participate in the formative evaluation activities via a World Wide Web site developed for this project. This World Wide Web site will be used to disseminate ongoing information about the project.

Grant Number: H327A000059

**Development of Speech Recognition and Computer Communications as a Support
for Deaf and Hard-of-Hearing Students**

Project Director: Stinson, Michael; McKee, Barbara; Lasky, Jeffrey; Phelps, Andrew
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Beginning Date: 9/01/00
Ending Date: 8/31/02

Purpose: The overall goal of the project is to develop procedures to adapt new speech recognition technology to provide real-time speech-to-text transcription to support deaf and hard of hearing high school and middle school students in mainstream classrooms.

Method: The project has four major activities: 1) perform development work to provide a system that enables an intermediary captionist, in following classroom discourse, to produce text at the rate of approximately 100 words per minute; 2) develop a system for computer communications, which includes software for displaying text, a local area network, and three different display devices, that is specifically designed for speech-to-text support services; and 3) develop materials and procedures to train support personnel to use speech recognition and the computer communications system.

Products: The project will result in a speech-to-text transcription program, and will provide knowledge regarding the needs of students and service providers and regarding the readiness of the system for the classroom by conducting focus groups and running pilot trials in classrooms.

Grant Number: H327A000060

Accessible Graphing Scientific Interactive Calculator

Project Director: Morford, Ronald A.

Beginning Date: 9/01/00

Automated Functions

Ending Date: 8/31/02

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Purpose: Many high schools use a graphing scientific calculator to assist students in math and science courses. These calculators, with a built-in screen, display graphs and perform scientific functions. The calculators are a valuable tool for high school teachers and students and are used widely in higher math (Algebra I and beyond) and science courses. Unfortunately, the graphing scientific calculators are not accessible to visually impaired students. This project will design, develop, test, and evaluate a system to provide better access to graphs and scientific expressions for visually impaired students.

Method: The Accessible Graphing Scientific Interactive Calculator project will use the Immersion Corporation haptic (forced feedback) FEELit Mouse as the graph peripheral. It will also use stereo sound to represent the graph(s) and synthetic speech to provide feedback to the visually impaired student. Visually impaired students and their teachers and parents will be involved throughout the project.

Products: In addition to the project's development of a system to provide better access to graphs and scientific expressions for visually impaired students, the project will increase the knowledge base in interactive graph analysis and interactive scientific calculation research for visually impaired people.

Grant Number: H327A000063

Literacy Access On-Line

Project Director: Behrmann, Michael M.; Bannan-Ritland, Brenda

Beginning Date: 10/01/00

George Mason University

Ending Date: 9/30/02

4400 University Drive, MSN 4C6

Fairfax, VA 22030

703-993-3670

Fax Number: 703-993-3681

E-mail: mbehrmann@gmu.edu

Purpose: The project will research the effectiveness of the "Literacy Explorer," an Internet-based literacy tool for dyads of facilitators and students with disabilities, grades four to eight. The objectives of the project are the following: 1) continue accessibility/usability field testing of prototype with regional literacy facilitators; 2) refine prototype and continue formative evaluation, incorporating field-test findings; 3) conduct efficacy and feasibility research during field testing with regional and national parent alliance groups and reading experts; and 4) refine the prototype and make summative evaluation statements based on activities in Objectives 1, 2, and 3.

Method: Based on Phase I development efforts, George Mason University and the Parent Educational Advocacy Training Center are in the final stages of developing the on-line literacy prototype reading tool called "Literacy Explorer." Found in the context of a World Wide Web-based learning environment known as Literacy Access OnLine, this prototype was developed to address the unique literacy needs of both struggling readers and their

literacy facilitators. "Literacy Explorer," an Electronic Performance Support System, demonstrates a simultaneous learning environment for both the literacy facilitator and the student. Incorporating findings from reading experts in the rapidly developing field of literacy instruction, "Literacy Explorer" simulates an expert system for non-expert facilitators and provides an array of literacy learning experiences for children struggling with reading and writing.

Products: The availability of an assistive technology like the "Literacy Explorer" on the World Wide Web will allow literacy instruction to be available for everyone. The project will disseminate results of its research and evaluation, make a beta version available to national audiences, and explore options for CD-ROM development.

Grant Number: H327A000071

Early Childhood Technology Integrated Instructional System (EC-TIIS)

Project Director: Huting, Patricia
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1 University Circle
Macomb, IL 61455-1390
309-298-1634
Fax Number: 309-298-2305
E-mail: pl-huting@wiu.edu

Beginning Date: 10/01/00
Ending Date: 9/30/02

Purpose: The Early Childhood Technology Integrated Instructional System (EC-TIIS), a Steppingstones of Technology Innovation Phase I—Development project, will improve technology services to young children with disabilities by offering access to effective family and professional development materials in a World Wide Web-based system of nationally available learning opportunities organized in an easy-to-use, accessible format.

Method: The project will develop and refine a technology-based approach and test its feasibility for: 1) improving results of education, and 2) improving access to and participation in the general curriculum for young children with disabilities. EC-TIIS will develop a unique teaching/learning World Wide Web site community that will combine training content from tested and effective early childhood technology-related projects into a series of workshops designed to provide needed knowledge and skills to adults responsible for educational programs for young children. This content will be organized into nine on-line workshops: 1) "Classroom Environment," 2) "Adaptations," 3) "Curriculum Integration," 4) "Technology Assessment," 5) "Software," 6) "Emergent Literacy," 7) "Expressive Arts," 8) "Science/Math/Social Studies," and 9) "Family Participation." These workshops contain salient topics related to young children with disabilities ages three to eight and appropriate technology applications across a wide range of topics related to the general curriculum (i.e. appropriate activities for young children). The target audience includes families, program staff, therapists, related services staff, educators, faculty, students, and the full range of audiences addressed in IDEA 97. The workshops can be used by individuals, in staff development activities, and in coursework at the undergraduate and graduate levels. The feasibility of the features, design, content, use, and effectiveness of the World Wide Web site will be addressed through advisory panel review and field testing at four universities.

Products: EC-TIIS products will include a World Wide Web site with a series of workshops designed to provide needed knowledge and skills to adults responsible for educational programs for young children. The World Wide Web site will ultimately provide an option for users to design their own customized workshops, which will then be added to the World Wide Web site offerings. The World Wide Web site will promote dynamic material in the form of timely updates as new information becomes available and will be continued as an instructional commitment when the project is completed.

Grant Number: H327A000074

**Realtime Online Captioning for Remote Classrooms:
Phase 2, Research in Effectiveness**

Project Director: Fifield, Bryce
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North Dakota Center for Persons with Disabilities
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Minot, ND 58707
701-858-3580
Fax Number: 701-858-3483
E-mail: fifield@farside.cc.misu.nodak.edu

Beginning Date: 9/01/00
Ending Date: 8/31/02

Purpose: This project will conduct a series of case studies to establish the effectiveness of a system for providing real-time captioning via the Internet to rural and isolated schools. This remote, online captioning system (RROCS) will be studied to determine how well it works for students with a variety of learning challenges in a range of instructional settings. The project will also study how the captioning affects student comprehension.

Method: The model for RROCS is grounded in two propositions: access to and engagement with instructional content are necessary in order for learning to occur, and academic performance increases as students engage with instructional content. The previous model of the system was field-tested through implementation of the real-time captioning system in two non-classroom settings. This project will conduct a series of case studies, multiple baseline single subject studies, participant observations, and focus groups with study participants assessing RROCS's effectiveness. Four waves of experimental studies will be conducted.

Products: Information from the research will be used to better understand the context in which RROCS is used. The resulting information will be useful in refining the system and developing better curriculum support materials for classrooms where it is being used.

84.327B Readline

Grant Number: H327B980001

The Reading Project

Project Director: Gunther, Noel; Cortiella, Candace; Esselman, Mary
GWETA, Inc.

2775 S. Quincy Street
Arlington, VA 22206
703-998-3290

Website: <http://www.weta.org>

Beginning Date: 1/01/99

Ending Date: 12/31/02

Purpose: WETA, the public broadcasting station in Washington, D.C., will develop "The Reading Project," which will disseminate research-based information on early diagnosis and effective strategies for teaching reading to children with disabilities who demonstrate difficulties learning to read. This project's hope is to reach parents, teachers, school administrators, tutors, day care providers, and the general public—anyone with an interest in helping children learn how to read.

Method: "The Reading Project" will launch an ambitious, media-based campaign to disseminate research-based findings to the widest possible audience. This project will be advised by nationally known experts in the field, such as Dr. Carol Sue Englert, Dr. Lynne Fuchs, Dr. Joseph Jenkins, Dr. Ed Kame'enui, Dr. Margo Mastropieri, Dr. Louisa C. Moats, Dr. Rollanda O'Connor, Dr. Anne Marie Palincsar, Dr. Louise Spear-Swerling, and Dr. Lee Swanson. The project has developed a comprehensive dissemination plan, working with partners such as the American Federation of Teachers, the American Association of School Administrators, the American Library Association, the Council for Exceptional Children, the International Reading Association, the National Association of Elementary School Principals, the National Association of State Directors of Special Education, the Urban Special Education Collaborative, and Zero to Three, among many others.

Products: The project's services will include: 1) a public television documentary offering information on early identification of children with language or reading problems and effective strategies for addressing those problems; 2) two videotapes explaining and demonstrating effective, research-based techniques for helping children learn to read; 3) a print guide designed for teachers and parents, which will include research-based strategies, exercises, and resources; 4) three teleconferences featuring top experts from around the country; and 5) an ambitious World Wide Web site, with in-depth information, research articles, bulletin board discussions, and "Ask the Expert," giving parents and teachers around the country the chance to speak with top researchers and master teachers. This Web site will build on WETA's successful experience operating LD OnLine (www.ldonline.org), an award-winning Web site on learning disabilities.

84.327C Video Description Projects

Grant Number: H327C980001

Video Description Projects Narrative Television Network Broadcast and Cable

Project Director: Stovall, Jim
Narrative Television Network
5840 South Memorial Drive Suite 312
Tulsa, OK 74145
918-627-1000

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Narrative Television Network Broadcast & Cable (NTN) will continue to provide accessible television and movie programming to blind and visually impaired Americans and expand its service through its new relationship with The Family Channel.

Method: Programming selections will be made from the widest selection of movies as well as network and syndicated television programming, taking into account the limited number of hours of accessible programming for children and adults with visual disabilities. NTN selects a broad cross-section of dramas, comedies, musicals, classical theatre, and other types of television and movie programming. NTN's industry experts will help to evaluate the digital technology which is being developed as well as new technologies currently being produced.

Products: During the three-year project period, NTN will produce 900 hours of accessible programming (300 hours per year). Outreach and dissemination will continue and be expanded during the three-year project period.

Grant Number: H327C980003

Expand Video Description on Cable Programming and Historic Public Television Events

Project Director: Apone, Tom
WGBH Educational Foundation
Descriptive Video Services
125 Western Avenue
Boston, MA 02134
617-300-3490

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is for WGBH-TV's Descriptive Video Service (DVS) to make television programs and home videos accessible to blind and visually impaired audiences using video description.

Method: Blind and visually impaired audiences will be able to access the video descriptions by selecting the Second Audio Program (S.A.P.) which is standard on most stereo televisions and video cassette recorders (VCR). There is no charge for viewers to receive this service. For home video, the description is recorded onto a special version of the tape, thereby making it an openly described tape, playable on any VCR. No special equipment is required. Described home videos are sold at the same suggested retail price as the version without description. Program selection will be based on consumer feedback and reflect the audience need for diversity.

Products: This project will result in an increased number of hours of television programming that include video description for visually impaired viewers. DVS will promote the project by providing promotional materials in large print and Braille; maintaining an audio information system, accessible by a toll-free telephone number; developing a World Wide Web site; disseminating information about the service to organizations serving the target population including schools, agencies and membership organizations; and informing people at blindness conventions, library conferences, and video stores. In addition DVS will ensure that captions from these programs are maintained for deaf and hard-of-hearing viewers. DVS will work with The Caption Center, another service of WGBH, on this effort.

84.327D
Dramatic and Theatrical Experiences for
Individuals Who Are Deaf or Hard of Hearing

Grant Number: H327D000006

Establishing a Deaf National Conservatory of Theatrical Training

Project Director: Waterstreet, Ed
Deaf West Theatre Co., Inc.
5112 Landershim Blvd.
North Hollywood, CA 90601-3717
818-762-2998

Fax Number: 818-762-2981

E-mail: DeafWest@aol.com

Beginning Date: 3/01/00

Ending Date: 2/28/05

Purpose: This project will expand theatrical and cultural experiences for persons who are deaf and hard of hearing.

Method: The project will broaden the theatrical and general cultural experiences of deaf and hard of hearing persons in the United States. Working collaboratively with widely acclaimed deaf and hearing actors and artists, Deaf West Theatre Company (DWT) will provide training in drama and theatrical production to actors and artists who are deaf and hard of hearing, in order to cultivate their skills, develop self-esteem and cultural pride, and create a legacy of Deaf culture.

Products: The project will provide outreach activities including professional and technical assistance to regional and local programs through the establishment of a clearinghouse of information and as a provider of technical assistance to deaf theater companies throughout the nation. The project will also produce and promote a series of videotaped performances for distribution and national and regional broadcasting.

(84.327E)
Captioning Children's Educational Materials

Grant Number: H327E980001

Closed Captioning of the Series: The History Channel Classroom

Project Director: Duckler, Max
CaptionMax, Inc.
530 North Third Street #210
Minneapolis, MN 55401
612-341-3566

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Under this project, CaptionMax, Inc., will provide quality off-line "pop-on" style captioning for "The History Channel Classroom," a popular non-commercial, educational program that airs nationally on the History Channel and is broadcast in classrooms across the country.

Method: CaptionMax will caption approximately 130 hours of educational programming per year for the History Channel series. This programming will enable all programs of "The History Channel Classroom" to be accessible to deaf and hard of hearing students and teachers.

Products: By providing captioning for the 130 hours of programming, this project will make educational programs that have never before been captioned accessible to deaf and hard of hearing students and teachers, a population of about five million individuals, and also to about six million viewers who use English as a second language.

Grant Number: H327E980002

Closed Captioning of the Series: "A&E in the Classroom"

Project Director: Duckler, Max
CaptionMax, Inc.
530 North Third Street#210
Minneapolis, MN 55401
612-341-3566

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of CaptionMax Inc. will provide quality off-line "pop-on" style captioning for the non-commercial educational program on the Arts and Entertainment (A&E) Network known as "A&E Classroom."

Method: Employing ten captioners and six stations as part of the CaptionMax team, the project will provide closed captioning (via the use of off-line "pop-on" style captioning) to over 130 commercial-free, hour-long programs per year of the grant. All captioning is done within guidelines incorporating recommendations from the National Association of the Deaf's Captioned Films/Videos Program and from mini-studies done with a deaf consumer advisory board.

Products: This project will enable all programs in the "A&E Classroom" series to become accessible to deaf and hard-of-hearing students and teachers.

Grant Number: H327E980007

Closed Captioned Educational Programming

Project Director: Karlovits, Joseph R.
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
724-514-4040

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: Through this project, VITAC will caption a variety of educational programming available to national TV audiences and to schools to make it accessible to students who are deaf or hard of hearing.

Method: With a 12-year track record of captioning for live and prerecorded programs, VITAC will provide captioning to approximately 266 hours of televised educational programming over the three-year grant period, including nationally televised programs that are viewed by children in an educational setting. The project will work to expand private-sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers, and it will continue to get input and guidance from the deaf community through its Viewer Advisory Panel.

Products: As a result of this project, over 152 half-hour programs and 51 quarter-hour programs of a comprehensive mix of nationally cablecast commercial-free educational television programming, will be captioned. All programming is approved and distributed by the Cable in the Classroom service that promotes in-school usage of TV programs.

Grant Number: H327E980008

Closed Captioned Educational Programming: The Noggin Channel

Project Director: Chao, Gene; Lorenz, Martha
National Captioning Institute, Inc.
1900 Gallows Rd. Suite 3000
Vienna, VA 22182
703-917-7600

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The primary goals of this project are to increase the availability of closed-captioned, noncommercial educational programming for children who are deaf or hard of hearing and to expand the variety of accessible educational programming available for use in the classroom. The National Captioning Institute (NCI), in cooperation with the Children's Television Workshop (CTW) and Nickelodeon, will complete closed captioning of 600 hours of educational programming for airing on "NOGGIN," CTW and Nickelodeon's newly formed 24-hour noncommercial educational cable television channel. "NOGGIN" combines CTW favorites such as "Sesame Street," "Electric Company," and "3-2-1 Contact" with Nickelodeon shows like "Blue's Clues" and "Nick News" to build a foundation of educational programming and to encourage kids and families to use their "noggin." The goal of "NOGGIN" is to "plug into children's natural curiosity, enthusiasm, and desire to learn."

Method: The project will work directly with CTW and Nickelodeon to caption programs that are slated to be aired on the new noncommercial "NOGGIN" channel. For each year of the three-year project, approximately 200 hours of programming will be captioned. In the first year, captioning resources will be divided among three CTW programs ("3-2-1 Contact," "Electric Company," and "Square One TV") and three Nickelodeon programs

("Gullah Gullah Island," "Wild Side," and "Make the Grade"). In years two and three, additional programs will be added to the program mix, including new original programs that CTW and Nickelodeon plan to produce for "NOGGIN" after its first year of operation.

Products: The project's primary product will be its 600 hours of closed-captioned educational programming for children.

Grant Number: H327E980009

Closed Captioned Educational Programming

Project Director: Kay, Lori; Becker, Sue; Apone, Tom
WGBH Educational Foundation
125 Western Avenue
Boston, MA 02134
617-492-9225

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of the WGBH Educational Foundation will closed caption a variety of nationally distributed instructional television programs delivered through the National Educational Telecommunications Association (NETA) Educational Resources program. It will reflect program choices of educators, parents, and students and use the highest quality captioning standards and professional experience.

Method: The project will provide captioning of approximately 126 hours of educational programs each year of the grant. It will ensure a wide selection of programming available to over 26,000,000 students through NETA's Educational Resources affiliates at public television stations and through direct provision to participating school districts.

Products: In keeping with its mandate to serve all deaf and hard-of-hearing students, the project addresses a wide variety of educational programming, including math, science, English, health, social studies, history, fine arts, geography, vocational education, and other programming as appropriate.

Grant Number: H327E980010

Closed Captioned Educational Programming

Project Director: Kay, Lori; Apone, Tom
WGBH Educational Foundation
The Caption Center
125 Western Ave.
Boston, MA 02134
617-300-3888

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project of the WGBH Educational Foundation will add closed captioning to a variety of nationally distributed instructional television programs delivered through the Cable in the Classroom program. It will reflect program choices of educators, parents, and students and use the highest quality captioning standards and professional experience.

Method: The project will provide captioning of approximately 113 hours of educational programs each year of the grant. It will ensure a wide selection of programming available to over 42,000,000 students through the Cable in the Classroom program, which has over 8,000 cable operators.

Products: In keeping with its mandate to serve all deaf and hard-of-hearing students, the project addresses a wide variety of educational programming, including math, science, English, health, social studies, history, fine arts, preschool skills, and other programming as appropriate.

84.327F

Closed Captioned Spanish Television Programs

Grant Number: H327F990001

Provide Spanish Language Real-Time Captioning

Project Director: Hansel, Michael
Real-Time Captioning Institute, Inc.
16031 Sherman Way
Van Nuys, CA 91406
818-376-0406
Fax Number: 818-376-0416
E-mail: RTC@MSN.COM

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Real-Time Captioning, Inc. (RTC) will provide 400 hours of Spanish real-time captioning. This project will enable the Latino deaf and hard-of-hearing community to participate in and enjoy programming providing educational, social, and cultural benefits. This project will also benefit persons with reading deficiencies and those persons learning Spanish as a second language.

Method: The project will utilize existing equipment, facilities, and personnel to ensure cost-effectiveness. Examples of topics that will be addressed are: speed of captions, error rates, positioning of captions, and density of content.

Products: Arrangements have been made with Telemundo to close caption the following network programs: "Occurrio Asi," "CBS Telenoticias National News," and "Noticiero Telemundo." RTC will help create and maintain a bilingual Website serving as an immediate conduit between RTC and the community. RTC's bilingual monthly newsletter will cover topics of importance to the deaf and hard of hearing. It will serve as an open forum to discuss and improve Spanish-language captioning.

Grant Number: H327F990005

Closed Captioned Spanish Television Programs — CNN en Espanol

Project Director: Helminiak, Jeff
National Captioning Institute, Inc.
1900 Gallows Road, Suite 300
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with "CNN en Espanol," will complete closed captioning of more than 460 hours of Spanish-language television programs over a three-year period, in order to meet the diverse cultural and educational interests of Latin American deaf and hard-of-hearing consumers. The two programs on "CNN en Espanol" selected for captioning ("El Mundo Informa" and "Enfoque") reflect programs that address the diverse interests of the Hispanic viewing audience for access to news and public information.

Method: The project will work directly with "CNN en Espanol" to caption these two popular news and public information programs. The project will establish and support a consumer advisory group that will meet annually to provide feedback regarding the quality of captioning, and will deliver cost-effective captioning services that meet the highest quality captioning standards in the industry.

Products: "El Mundo Informa" is a half-hour weekly Spanish-language version of "CNN World Report," the world's largest television news exchange, providing an unedited forum for reports from broadcasters around the globe. "El Mundo Informa" is seen on "CNN en Espanol" several times throughout the week, in different time periods each day. "Enfoque" is a half-hour weekday program that explores a different topic Monday through Friday. Programming provides viewers with in-depth stories on topics of interest, with a timely wrap-up each weekend. The topics for each weekday include: 1) high fashion and style; 2) developments in science and technology, with an emphasis on achievements and contributions by Latin American scientists, inventors, and researchers; 3) the conflicts between people and nature; 4) the latest developments in medicine; and 5) exotic destinations around the world.

84.327G

Research Institute on the Use of Assistive Technology in Education

Grant Number: H327G000004

University of Kentucky Assistive Technology Research Institute

Project Director: Hasselbring, Ted S.; Lahm, Liz

Beginning Date: 10/01/00

University of Kentucky

Ending Date: 9/30/04

Department of Special Education & Rehab.

229 Taylor Education Bldg.

Lexington, KY 40506-0001

859-257-7908

Fax Number: 859-257-1325

E-mail: tsh@pop.uky.edu

Purpose: This project has two major goals: 1) to examine factors related to the planning, development, implementation, and evaluation of assistive technology (AT) services in schools, and 2) to disseminate the findings of the research in ways that will assist school personnel to develop or improve AT policies and practices for students with disabilities.

Method: To meet these two goals, research questions will be answered via a series of studies that will be performed on the following topics: 1) the status of AT use in K-12 schools and the role that AT provides in the education of students with disabilities; 2) the policies, procedures, and resources that school districts use to develop and deliver AT services to their students; 3) the ways that AT decisions are made by teams of people who develop Individualized Education Programs (IEPs) for students enrolled in special education programs; 4) the training and technical support that is needed by individuals who are involved with planning and implementing the use of AT devices and services with students; 5) the integration of AT into learning environments and the ways that AT devices and services are used to facilitate instruction and access to the curriculum; 6) the effect that the use of AT devices and services have on the academic, social, and functional performance of students who use them; and 7) the extent to which institutions of higher education are developing AT knowledge and skills in those who are preparing for professional positions in schools. A variety of research designs will be used to obtain data to answer the research questions in each of the above areas. Studies will include national surveys of AT practices of state departments of education, school districts, special education teachers, and institutions of higher education. Case studies will be conducted at benchmark school districts to identify AT promising practices. AT quality indicators will be validated and used as criteria for evaluating AT practices. Interviews and observational studies will be used to examine how AT is being considered when developing IEPs and the ways that professionals and parents interact during that planning process. Interactive research will be conducted via the World Wide Web to identify critical incidents concerning effective and ineffective applications of AT devices and services and to obtain feedback about AT policy options that are identified as a result of policy analysis research that will be conducted. The AT knowledge and skills needed by special education teachers and related services personnel also will be identified and validated.

Products: In addition to conventional research articles that will be submitted to professional journals, a number of products that have practical implications for implementing AT practices will be generated as a result of the research, such as policy guidelines, forms and instruments to support various AT activities, reports of best practices, AT self-assessment instruments for professionals, and templates for designing and implementing components of AT programs, among others. An accessible, user-friendly World Wide Web site also will be used to

report ongoing AT research results, recommendations, and resources. Special interpretive reports that will translate the research results into implications for practice also will be prepared for dissemination. A national symposium and a national interactive teleconference will be conducted to further disseminate results of the research during the dissemination phase of the project.

84.327H Research on Educational Captioning

Grant Number: H327H000002

The Relation Between Eye Movement and Reading Captions and Print by School-Age Deaf Children

Project Director: Jensema, Carl
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Silver Spring, MD 20902
301-942-4346
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Beginning Date: 9/01/00
Ending Date: 8/31/03

Purpose: This research explores how the eye movement patterns of deaf children relate to their skill in reading both captions and printed text, and whether caption reading habits (viewing frequency, type of program, etc.) relate to eye movement and printed text reading skills.

Method: The study will be conducted at the Western Pennsylvania School for the Deaf (WPSD), a large school for deaf students who are from a variety of socioeconomic backgrounds. A sample of 100 WPSD students will be selected to participate. Data will be collected from the subjects, their school records, their teachers, and their parents. Each year for three years, the project will collect data related to eye movement and reading skills from the same group of students. SAT-HI (Stanford Achievement Test - Hearing Impaired Edition) is routinely given to WPSD students and their scores are available in the school records. The project will supplement the SAT-HI scores with other tests such as the TERA (Test of Early Reading Ability - Deaf or Hard of Hearing) and the Gray Oral Reading Test-III to help evaluate reading ability. TERA is an appropriate test for deaf children ages 3 years and up, and it focuses on the construction of meaning from print, knowledge of the alphabet and its functions, and understanding of the conventions involved in written language. The Gray Oral Reading Test will assess reading rate, accuracy, and passage comprehension. The subjects will also be surveyed to determine what programs they normally view, and then a sampling of material from such programs will be recorded off the air. The survey will evaluate both caption reading skills and skills in reading information printed on paper. The project will develop its own custom video materials by writing a script and then shooting a video for the script. The video material will be edited and used to make appropriate materials for evaluating both eye movement and program comprehension. The data collected will be entered into computer files and analyzed using StatView, Excel, and several custom-written graphics programs.

Products: Formal reports and journal articles will be developed and disseminated. The project will send reports to an in-house mailing list of caption agencies and colleagues who are interested in captioning research. Presentations at professional conventions will be made.

Grant Number: H327H000003

Research on Edited Captions for Deaf Children

Project Director: Loeterman, Mardi; Paul, Peter

WGBH Educational Foundation

125 Western Avenue

Boston, MA 02134

617-330-2498

Fax Number: 617-300-2498

E-mail: Mardi_Loeterman@wgbh.org

Beginning Date: 1/01/01

Ending Date: 12/31/03

Purpose: This project is a collaboration between the CPB/WGBH National Center for Accessible Media at the WGBH Educational Foundation and researchers at Ohio State University to investigate comprehension differences when deaf and hard-of-hearing children watch videos with edited captions versus near-verbatim captions.

Method: The project will evaluate effects of edited captions—captions with a slower presentation rate and modified language—on comprehension. For many deaf children, reading is a frustrating experience, and reading captions is challenging. The goal of edited captions is to help children who are not fluent readers have greater success reading captions and understanding a program. The research questions are: 1) Is there a difference in children's comprehension scores between the near-verbatim and edited videos?; 2) Is there an effect due to the type of assessment used?; and 3) What are the children's preferences and attitudes with respect to the captioned programs in the study and to captioned media in general? The study will use "Arthur," an Emmy-award winning and extremely popular children's program on public television. The project will use the existing "Arthur" programs, developing 16 videotapes for the study, half of the videos edited and half using the original near-verbatim captions. The project will set up after-school "Arthur" Clubs at eight New England schools, involving a total of 38 children. Participating children will be between 7 and 11 years old and must read at a 2.0 reading level or higher. During each session, children will watch an "Arthur" program with either edited or near-verbatim captions, and an examiner will assess each child on his or her comprehension of the story. There will be two types of assessments—one known as QAR, question-answer relationships, and the other a Retell format—to reduce the possibility of the assessment influencing comprehension scores. Approximately three-quarters of the students will be part of a group design and the remaining students will be part of a single-subject design. Both the caption condition (edited or near-verbatim) and the assessment (QAR and retell) will be randomized. To gather qualitative information about children's attitudes towards captioned media, the project will set up a video lending library and ask students about their reasons for choosing particular programs (which will include both near-verbatim and edited tapes).

Products: This project will contribute significantly to knowledge on reading captions and comprehension. If the research results support the project's hypothesis, this research would argue for a second stream of captions on selected children's television programs, in addition to the original "near-verbatim" captions. Media with edited captions could be a new source of age-appropriate materials that have text which matches children's reading abilities.

84.327J Video Description Projects

Grant Number: H327J000001

Narrative Television Network: Broadcast & Cable

Project Director: Stovall, Jim
Narrative Television Network
5840 South Memorial Drive, Suite 312
Tulsa, OK 74145-9082
918-627-1000
Fax Number: 918-627-4101
E-mail: Narrative@aol.com

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: Through this project, Narrative Television Network (NTN) will continue to provide accessible television and movie programming to blind and visually impaired Americans.

Method: NTN has grown to include over 1,200 broadcast and cable affiliates reaching over 35 million homes in the United States. NTN provides accessible media to blind and visually impaired children and adults via broadcast, cable, and satellite television, home video and audio tapes, live theatre, and museum exhibits. Through NarrativeTV.com, accessible educational and entertainment programming is available to all visually impaired Americans 24-hours-a-day, on-demand, free-of-charge, via the World Wide Web.

Products: This project will allow NTN: 1) to produce over 200 additional hours of accessible programming; 2) to maintain the services of its Audience and Industry Relations Manager; and 3) to maintain accessible Program Guides in large print, Braille, and recorded formats.

Grant Number: H327J000002

Video Description: NTN Home Video & Web

Project Director: Stovall, Jim
Narrative Television Network
5840 South Memorial Dr., Suite 312
Tulsa, OK 74145-9082
918-627-1000
Fax Number: 918-627-4101
E-mail: Narrative@aol.com

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: Narrative Television Network (NTN) will provide accessible media to blind and visually impaired children and adults via broadcast, cable, and satellite television; home video; audio tapes; live theatre; museum exhibits; and free-of-charge, on-demand, 24-hours-a-day access via the Web at NarrativeTV.com.

Method: NTN will continue its home video work by producing and distributing 150 hours of narrated television, movie, and educational programming via home video as a free service to libraries, schools for the blind, organizations that serve visually impaired people, and NarrativeTV.com. NTN will continue its relationships and programming agreements with Viacom, King World, Four Star, Nostalgia Television, MCA Universal, Fox

Television, and World Vision Enterprises, and will narrate educational programming from National Geographic Television, Classic Arts Showcase, and American Independent Network. NTN also will narrate educational programming through its new relationship with "Cable in the Classroom," which involves such cable networks as Discovery Channel, Nickelodeon, the Weather Channel, Court TV, and CNN.

Products: The project will produce 150 hours of video description to serve individuals with blindness or visual impairments.

Grant Number: H327J000004

Video Description: Children's Programs on Public, Cable, and Commercial Television Networks by Descriptive Video Service

Project Director: Apone, Thomas
WGBH Educational Foundation
125 Western Avenue
Boston, MA 02134
617-300-3717
Fax Number: 617-300-1010
E-mail: Tom_Apone@WGBH.org

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: WGBH's Descriptive Video Service (DVS) will make public, cable, and commercial television programs accessible to the nation's blind and visually impaired children as well as other viewers who benefit from described children's programming.

Method: Narrated descriptions, depicting visual elements such as actions, settings, body language, and graphics of key visuals will be carefully crafted to fit into natural pauses in a program's dialogue, and will be accessible by selecting the Second Audio Program feature, standard on most stereo televisions and videocassette recorders. DVS will maintain a significant presence on the Public Broadcasting Service (PBS) and basic cable service, Turner Classic Movies (TCM). It will also introduce new cable partners, Nickelodeon and Toon Disney, in the first and second years respectively. DVS will continue to foster relationships with the major commercial networks and work with them to bring the debut of video description to commercial television. DVS will continue to reach out to blind and visually impaired children and their parents with materials in accessible formats as well as provisions for gathering feedback and evaluation. DVS will expand upon an aggressive campaign already in progress to educate the television and film industry about the availability of description and to promote video description to the general television audience. Private foundation support will be sought to supplement the activities in this project. DVS also will continue to encourage television producers and funders of children's programming to include video description in their budgets, emulating a new policy at WGBH requiring description in national production budgets.

Products: A minimum of 180 program hours for children will be described, and advocacy for video description will be enhanced.

Grant Number: H327J000005

Video Description of Television Programs for Adults

Project Director: Apone, Thomas

WGBH Educational Foundation

125 Western Avenue

Boston, MA 02134

617-300-3717

Fax Number: 617-300-1010

E-mail: Tom_Apone@WGBH.org

Beginning Date: 10/01/00

Ending Date: 9/30/03

Purpose: WGBH's Descriptive Video Service (DVS) will make public, cable, and commercial television programs accessible to the nation's 13.5 million people who are blind and visually impaired.

Method: Narrated descriptions, depicting visual elements such as actions, settings, body language, and graphics of key visuals will be carefully crafted to fit into natural pauses in a program's dialogue. This description is received by selecting the Second Audio Program feature, standard on most stereo televisions and videocassette recorders. DVS will maintain a significant presence on the Public Broadcasting Service (PBS) and basic cable service, Turner Classic Movies (TCM). It will also expand its presence by introducing a new cable partner, A&E, in the first year. DVS will continue to foster relationships with the major commercial networks and work with them to bring a debut of video description to commercial television. DVS will reach out to blind and visually impaired viewers with materials in accessible formats as well as provisions for gathering feedback and evaluation. DVS will expand upon an aggressive campaign already in progress to educate the television and film industry about the availability of description and to promote video description to the general television audience. Private foundation support will be sought to supplement the activities in this project. DVS also will continue to encourage television producers and funders of adult programming to include video description in their budgets.

Products: A minimum of 180 hours of programming aimed at an adult audience will be described, and advocacy for video description on behalf of individuals with blindness or visual impairments will be enhanced.

84.327K

Recorded Audio Cassettes for Visually and Print Disabled Students

Grant Number: H327K980002

Recorded Audio Cassettes for Visually and Print Disabled Students

Project Director: Geisel, Ritchie L.
Recording for the Blind and Dyslexic, Inc.
20 Roszel Road
Princeton, NJ 08540
609-520-8014

Beginning Date: 10/01/97
Ending Date: 9/30/00

Purpose: This project seeks to provide recorded audio cassettes for print disabled students at all educational levels by recording, producing, duplicating, and distributing four-track cassette versions of textbooks and other educational reading materials.

Method: Recording for the Blind and Dyslexic (RFB&D) will handle all requests for materials, arrange for copyrights from publishers of supplied textbooks, record or duplicate the books on one-hour cassettes, mail the cassettes on a free-loan, postage-paid basis, and handle all returned tapes and associated administrative and circulation functions.

Products: These cassette tapes will help provide equal educational opportunities to target students with visual and reading impairments and lessen some of the barriers they face in classrooms. By delivering the printed page to people who are blind, visually impaired, have a learning disability such as dyslexia, or who are unable to turn the pages of a standard textbook, RFB&D represents the critical difference between isolation and integration and between separation from and success in the classroom and the workplace.

84.327L**Closed Captioned Television Programs -
Local News and Public Information***Grant Number: H327L990001***Closed Captioned Television Programs—Local News and Public Information**

Project Director: Shedd, Tammie
Visual Audio Captioning
9803 Sharon Ct.
Fairfax, VA 22032-1000
703-278-9110
Fax Number: 703-934-9139
E-mail: jshedd@radix.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: The project will provide start-up costs for real-time captioning for persons who are deaf or hard of hearing, in order to improve their quality of life by providing daily hours of captioned local, state, and national news. It will develop and implement strategies for ensuring equal access and treatment for eligible project participants who are members of traditionally underrepresented groups and it will train expert real-time captioners.

Method: This project will provide real-time captions for local news programming during the following hours: 12:00 p.m. to 12:30 p.m. Monday through Friday, 6:00 p.m. to 6:30 p.m. Monday through Sunday, 11:00 p.m. to 11:35 p.m. Monday through Friday, and 11:00 p.m. to 11:30 p.m. Saturday and Sunday. These captions will reach over a million households in the greater Cleveland, Ohio area.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

*Grant Number: H327L990002***Closed Captioned Local News Programs WFTV-9 ABC**

Project Director: Howell, William
Media Captioning Services
2141 Palomar Airport Rd., Suite 310
Carlsbad, CA 92009-1426
407-599-8314
Fax Number: 407-599-8318
E-mail: captionusa@aol.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide stenographic real-time and live display captioning for the ABC television affiliate in Orlando, Florida during the following hours: 12 noon-12:30 p.m. Monday-Friday and 5:00-6:30 p.m. Monday-Friday. The captioning of these broadcasts will begin real-time captioning of news in the central Florida market, providing captioning for deaf and hard-of-hearing viewers of live and critically important breaking news.

Method: The project will form a consumer advisory group whose members will be selected from the deaf and hard of hearing community. This group will provide extensive feedback on such topics as caption placement, accuracy, use of color captions, and line length in assisting Media Captioning Services to provide the highest quality captioning.

Products: The mid-day and 5:00-6:30 newscasts captioned in this project will ensure that deaf and hard of hearing viewers of the number one TV station in Orlando will have real-time captioning of these important time blocks. WFTV9 serves an area encompassing over 2 million people, in one of the fastest growing areas of the country.

Grant Number: H327L990003

Closed Captioned Television Programs—Local News and Public Information

Project Director: Carter, Lorraine
Caption Reporters, Inc.
700 N. Fairfax Street, Suite 302
Alexandria, VA 22314
703-683-2300
Fax Number: 703-683-5289
E-mail: caption@earthlink.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project has two aims: to expand current levels of captioning to include local news programming, and to provide on-going training and mentoring of stenocaptioners.

Method: This project will caption five hours of local news weekly in Toledo, Ohio. On an annual basis, stenocaptioners will be trained and mentored in stress control, dictionary maintenance, new techniques, and new technologies.

Products: The project will provide increased exposure to news and local public information for the underserved deaf and hard of hearing community in the Toledo, Ohio area. The project will also result in more capable and professional stenocaptioners. They will be better able to cope with the high level of stress associated with captioning.

Grant Number: H327L990004

Real-Time Captioning of Local Broadcasting in the Four-State Area

Project Director: Mills, Steven
University of Kansas - Lawrence
Center for Research, Inc.
1052 Dole
Lawrence, KS 66045
316-421-6550
Fax Number: 316-421-6550
E-mail: smills@parsons.lsi.ukans.edu

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide real-time captioning for local news broadcasts and public affairs programming for rural southeast Kansas and the four-corners area of Kansas, Missouri, Arkansas, and Oklahoma. This project addresses the needs of persons who are deaf or hard of hearing as well as individuals who are learning to

read English as a second language.

Method: The project will be carried out through a cooperative agreement between the University of Kansas and KOAM-TV. The project will implement a telecommunications system that accommodates captioning of local television news broadcasts and public affairs programs and will provide real-time captioning for selected programming and off-line captioning of selected locally produced programming. It will develop a plan for on-going training to expand the base of local stenocaptioners and implement an evaluation process to monitor the operations of the project and the accuracy of the captioning services. The project will establish an advisory panel to provide on-going feedback regarding the quality of captioning services.

Products: The project will establish an on-going service delivery system to provide reliable and quality real-time captioning of news and other selected local programming of KOAM-TV that is of local interest to consumers who are deaf or hard of hearing.

Grant Number: H327L990006

**Closed Captioned Local News Programming —
Expand Realtime Captioning on KABC-TV Los Angeles**

Project Director: Pyle, Nicole
Media Captioning Services
2141 Palomar Airport Rd., Suite 310
Carlsbad, CA 92009-1426
760-431-2882
Fax Number: 760-431-8735
E-mail: nicole@mediacaptioning.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide stenographic real-time and live display captioning for a local station in Los Angeles during the following time frames: 1) 5:30 a.m.-7:00 a.m. Monday-Friday and 2) 4:00-5:00 p.m. Monday-Friday. This project will enable deaf and hard-of-hearing viewers to have real-time captioning of all morning and evening KABC-TV newscasts.

Method: This project will meet the need to have sufficient stenocaptioning personnel in place who are familiar with local names and terminology and who can provide real-time captioning on an emergency basis to a high level of accuracy. The project will develop additional real-time stenocaptioning personnel who can caption programming on a regular basis and assist with emergency captioning when necessary.

Products: Viewers of KABC-TV will have all morning and evening newscasts real-time captioned, totaling 1,304 hours per annum of local news on this station

Grant Number: H327L990008

Closed Captioned Television Programs

Project Director: Leonard, Charles
Closed Captioning Services, Inc.
3600 29th Street
Kentwood, MI 49512
616-940-9444
E-mail: CLOSEDCAP@GRNET.COM

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will work in close cooperation with a local television station in Grand Rapids, Michigan, to provide access for the deaf and hard-of-hearing audience to local news broadcasts in a viewing area of nearly 1 million households.

Method: The project will provide closed captioning of local news television programming and will provide deaf and hard-of-hearing viewers accessibility to these programs during the week and on weekends. The project will expand the closed captioning of approximately 520 hours per year of local news programs over the three-year period, and it will seek input from the deaf community through the project's consumer advisory board. It will increase private sector support for closed-captioned programming by using federal funds as an inducement for funding support from the station.

Products: The output of this project's regularly scheduled hours of captioned local news and public affairs programming each week on WOOD-TV will fulfill viewer demands for more captioned programming. The project intends to promote and publicize the closed-captioned news service in order to create greater awareness and expand the audience size.

Grant Number: H327L990009

Closed Captioning for Local News and Public Information

Project Director: Leonard, Charles
Closed Captioning Services, Inc.
3600 29th Street
Kentwood, MI 49512
616-940-9444
E-mail: CLOSEDCAP@GRNET.COM

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This company will work in close cooperation with a television station in Grand Rapids, Michigan to provide access for the deaf and hard of hearing audience to local news broadcasts in a viewing area of nearly 1 million households.

Method: The project will provide closed captioning of local news television programming and will provide deaf and hard-of-hearing viewers accessibility to these programs during the week and on weekends. It will expand the closed captioning of approximately 494 hours per year of local news programs over the three-year period. It will seek input from the deaf community through the project's consumer advisory board and increase private sector support for closed-captioned programming by using federal funds as an inducement for funding support from the station.

Products: The output of this project's regularly scheduled hours of captioned local news and public affairs programming each week will fulfill viewer demands for more captioned programming. The project will promote and publicize the closed-captioned news service to create greater awareness and expand the audience size.

Grant Number: H327L990012

Closed Captioned Television Programs — Local News and Public Information

Project Director: Shedd, Tammie

Beginning Date: 10/01/99

Visual Audio Captioning

Ending Date: 9/30/02

9803 Sharon Court

Fairfax, VA 22032-1000

703-278-9110

Fax Number: 703-934-9139

E-mail: jshedd@radix.net

Purpose: This project will provide real-time captions for a local television station's 6:00 a.m. to 7:00 a.m. Monday through Friday newscast and another's 10:00 p.m. to 11:00 p.m. Monday through Sunday newscast. These captions will reach 1,172,000 households in the greater Cleveland, Ohio, area.

Method: This project will train personnel to become expert real-time captioners and it will improve the quality of life for the deaf and hard of hearing by providing daily hours of captioned local, state, and national news and public service announcements.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

Grant Number: H327L990013

Providing Real-Time Stenographic Captioning Services to KTUL in Tulsa, Oklahoma, and KCPT in Kansas City, Missouri/Kansas

Project Director: Schulman, Anne L.; Patterson, Kala J.

Beginning Date: 10/01/99

Captioning Services for Kansas

Ending Date: 9/30/02

1118 E. 1600 Road

P.O. Box 3593

Lawrence, KS 66046-0593

785-842-9994

Fax Number: 785-842-9993

E-mail: 103325.200@compuserve.com

Purpose: This project will train new real-time stenographic captioners and provide real-time stenographic captioning for news broadcasts on a Tulsa, Oklahoma, television station. The project will also provide real-time captioning for weekly public information programs in Kansas City, Missouri, and Kansas City, Kansas.

Method: Training will be developed for two court reporters to work as real-time stenographic captioners. Captioners will provide real-time captioning services during the three years of the project to reach the more than 3,000,000 viewers in the combined markets of Oklahoma City and Kansas City, over 250,000 of whom are deaf or hard of hearing.

Products: The project will increase access to local community news for viewers who are deaf or hard of hearing, who are learning English as a second language, who are learning to read, or who are viewing in noisy environments. Access will be given to both daily news broadcasts and weekly public information programming.

Grant Number: H327L990017

Closed Captioned Local News and Public Information — WHEC-TV

Project Director: Merriam, William; Parker, Darlene; Okrand, Marc

Beginning Date: 10/01/99

National Captioning Institute, Inc.

Ending Date: 9/30/02

1900 Gallows Road, Suite 3000

Vienna, VA 22182-3865

703-917-7600

Fax Number: 703-917-9878

E-mail: orphan@ncicap.org

Purpose: Through this project, the National Captioning Institute (NCI), in collaboration with WHEC-TV in Rochester, New York, will provide closed captioning of local news and public information programs over the three years of the project.

Method: This project will allow NCI to real-time caption three new local news programs on WHEC-TV, offering a full range of early morning, early evening, and late evening newscasts that are accessible to the area's deaf and hard-of-hearing population.

Products: The reach of the television station where the captioning will occur includes over 90,000 people in the Rochester, New York, area who are deaf or hard of hearing. By adding three new local news programs to the one that is already being real-time captioned on the station, a full range of daily newscasts will provide access to information for the deaf community, as well as for those who are learning English or have learning disabilities.

Grant Number: H327L990018

Closed-Captioned Local News and Public Information: WOKR-TV

Project Director: Merriam, William; Parker, Darlene

Beginning Date: 10/01/99

National Captioning Institute, Inc.

Ending Date: 9/30/02

1900 Gallows Road, Suite 3000

Vienna, VA 22182-3865

703-917-7600

Fax Number: 703-917-9878

E-mail: orphan@ncicap.org

Purpose: Through this project, the National Captioning Institute (NCI), in collaboration with WOKR-TV Rochester, New York, will provide closed captioning for local news and public information programs.

Method: The news programming to be captioned will include a weekday early morning news program, a prime time news show, an 11:00 p.m. news broadcast, and a regularly shown program on multicultural affairs and community events.

Products: The news shows being captioned are broadcast to an audience of over 1 million people in the Rochester area, with a population of over 90,000 deaf or hard-of-hearing individuals. The captioned shows will culturally benefit this community as well as those people who are learning to read, who are learning English, or who have learning disabilities.

Grant Number: H327L990019

**Live Real-Time Captioning of News and
Public Affairs Programming for the Pacific Northwest**

Project Director: Gazeley, Carolyn
LNS Captioning
2130 SW Jefferson Street, Suite 200
Portland, OR 97201-7710
503-299-6200
Fax Number: 503-299-6839
E-mail: Insinc@gstis.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will expand live, real-time captioning for news and public affairs programs in Oregon and expand the project staff's capacity to provide high-quality captions

Method: The project will provide captions for the Portland, Oregon, city council, The City Club of Portland, a public broadcast program, and for KEZI, a local television station. Through its real-time captioning services, the project will increase access to news and information through television news broadcasts, expand the amount of information available to citizens regarding key issues of concern through captioning local government meetings and locally produced programs.

Products: The project will work with community leaders who have hearing impairments, to reflect their input and build new relationships with them and with the hearing-impaired community, giving them vital access to needed and otherwise inaccessible information. Benefits will also accrue to children and adults who need development with literacy and vocabulary and who are learning English.

Grant Number: H327L990020

Closed Captioned Television Programs: Local News and Public Information

Project Director: Shedd, Tammie
Visual Audio Captioning
9803 Sharon Court
Fairfax, VA 22032-1000
703-278-9110
Fax Number: 703-934-9139
E-mail: jshedd@radix.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will enable Visual Audio Captioning (VAC) to provide real-time captioning of area news programs broadcast on WOIO-TV in Cleveland, Ohio.

Method: VAC will collaborate with WOIO-TV in Cleveland, Ohio to provide real-time captions for the weekday afternoon and early evening news broadcasts and daily late-evening news programs, reaching over 1,172,000 households. The project will also train captioners to become expert real-time captioners.

Products: The news services captioned by this project will inform and help bring persons who are deaf or hard of hearing into the mainstream of society and serve as educational media to all other individuals who can benefit from closed captioning, including those who are learning English as a second language, who are learning literacy, or who have disabilities.

84.327M Technology Research to Practice

Grant Number: H327M000003

The Computer Reader/Word Processor as a Compensatory Aid for Middle School Students with Learning Disabilities

Project Director: Jamison, Patricia J.

Prince George's Board of Education

14201 School Lane, Suite 202A

Upper Marlboro, MD 20777-9983

301-952-6336

Fax Number: 301-952-6342

E-mail: pjamison@pgcps.org

Beginning Date: 10/01/00

Ending Date: 9/30/03

Purpose: As the national school reform efforts raise the bar for academic performance for secondary students, the student with learning disabilities (LD) is put at increasing disadvantage. This is particularly true of secondary students with serious reading and writing deficits. The purpose of this study is to evaluate the use of a computer reader and word processor technology with a group of middle schools students with reading and writing disabilities.

Method: Specifically, the study will evaluate the Kurzweil 3000 computer reader and TextHELP! software, which were specially designed for individuals with disabilities. Twenty-five students with learning disabilities enrolled in five middle schools will be given access to a computer for use in their social studies and English coursework beginning in the second semester of seventh grade and continuing through the second semester of eighth grade. A comparison group of 25 students will also participate.

Products: The project will: 1) determine the impact of the computer reader/word processor package on measures of academic achievement of students with learning disabilities during seventh and eighth grades in two content areas; 2) determine the impact of the use of the technology on students' reading and writing skills; 3) evaluate teacher satisfaction with the technology; and 4) describe the differential effects of the use of the technology for various subgroups of students with learning disabilities.

Grant Number: H327M000013

**Improving Communication and Coordination of Assistive Technology
Services for Students with Orthopedic Impairments**

Project Director: Van Wyck, Michael
Bibb County Public Schools
P.O. Box 6157
Macon, GA 31208
912-765-8709
Fax Number: 912-765-8636
E-mail: mvanwyck@bibb.k12.ga.us

Beginning Date: 11/01/00
Ending Date: 10/30/03

Purpose: This project will improve the assessment for and implementation of assistive technology (AT) for students in the Orthopedically Impaired (OI) Program in the Bibb County (Georgia) Program for Exceptional Children.

Method: The project will achieve five objectives: 1) set up a multi-point, computer-based video conferencing network through the county's existing wide area network, with an associated database for managing program,

student, and family data; 2) improve the implementation and maintenance of AT for students by promoting collaborative teams including staff, families, students, and consultants; 3) establish a mentoring and training system for OI staff that is supported by the conferencing network; 4) integrate the families of the students in the program into the network by helping develop supports, providing training, and supplying network access; and 5) develop mechanisms for monitoring the outcomes of the program and continuously improving the systems.

Products: The project will achieve the following outcomes: 1) establish a secure, on-line conferencing network, starting with 10 nodes and growing to 20 by the end of the project; 2) establish a database that can track data related to both the system and the students; 3) develop transdisciplinary collaborative teams using a systematic framework to analyze students' needs and implement accommodations; 4) increase the number of mainstream classes planned for OI students by 15% per year; 5) increase the ratio of standardized academic test scores for OI students as compared with their mainstream peers by 15% per year; 6) reduce the loss of student access to their AT to three days or less per year; 7) promote the resolution of 50% of documented home-based barriers to students' use of AT every year; 8) document 25% improvement in school function, as measured using valid, AT-sensitive outcome measures; 9) set up and maintain mentoring dyads among all network participants; 10) provide 75% of requested AT training for network staff each year, with minimum of 80% participant satisfaction ratings; 11) maintain high levels of interaction among mentoring dyads, with total interactions increasing 25% from the beginning figures; 12) set up a Parent Support Network with a parent coordinator to help develop it into a self-sustaining entity; 13) train parent mentors to help other parents work as collaborators with the school; 14) increase parent/teacher communication 50% by the end of the second year; and 16) develop an advisory board to maintain continuous improvement in the system.

Grant Number: H327M000014

**Assistive Technology for Law to Practice for
Early Intervention Children with Disabilities**

Project Director: Oliver, Deborah A.
Union-Baker Education Service District
10100 N. McAlister Lane
Island City, OR 97850
541-963-4106
Fax Number: 541-963-7256
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Beginning Date: 1/05/01
Ending Date: 1/04/04

Purpose: This project focuses on the assistive technology needs of children, specifically applied to technology use and access, technology-integrated curriculum, and improving transitions for young children with regard to assistive technology needs. The project will serve children receiving early intervention in eastern Oregon.

Method: The first priority will be to develop, revise, and implement a process to consider and provide for assistive technology needs through the development of an Assistive Technology Plan, which includes the following elements: referral, evaluation, extended assessment, plan development and implementation, review, and transition planning. The second priority will be the implementation of assistive technology planning with a specific focus on integrating software, peripherals, access, and individual assistive technology needs into curriculum designed to increase developmental levels for children with disabilities. The final focus will be to increase the quality of transitions for children from Early Childhood Special Education to elementary school with regard to assistive technology needs, by focusing on training, policy development, and interagency agreements.

Products: The expected outcomes will include an Assistive Technology Plan for early intervention children, computer work stations at all Early Intervention classroom sites, and an Internet connection at each site. An equipment lending library, software library, and transition planning process will be developed. The targeted results will include improved assessment, plan development, and provision of technology-integrated services and/or devices to children. Transitions will reflect intentional attention to the assistive technology needs of children with no decrease in the provision of services and/or devices.

Grant Number: H327M000015

**From Research to Practice: The Use of Microcomputer
Technology to Enhance Infants' Lives Project**

Project Director: Bednersh, Florene
Santa Barbara County Education Office
4400 Cathedral Oaks Road
P.O. Box 6307
Santa Barbara, CA 93160-6307
805-964-4711
Fax Number: 805-683-2482
E-mail: flogo@sbceo.org

Beginning Date: 9/01/00
Ending Date: 8/31/03

Purpose: This school-based project will bring the research of microcomputer technology, in conjunction with the use of adaptive switches and pediatric software, into practice in the Early Start Infant Programs. The project will address the fact that the results of research and development efforts are not applied in practice and will help students to achieve their full potential.

Method: The project will focus on leadership and planning, access to appropriate technology, training, ongoing technical support and coaching, collaboration, and adequate teacher time. The project's technology model will be offered in the Early Start Centers, in the community, and in the infants' homes. Training will be offered to the teachers and parents of the infants.

Products: The integration of a comprehensive model for microcomputer technology into an existing public school structure will significantly increase the efficiency and quality of instruction, while decreasing the amount of teacher time needed to achieve instructional objectives. In addition, it will enhance the quality of life for the infants and their families.

Grant Number: H327M000018

**Reading Instruction Every Adolescent Deserves: Technology Research
to Practice Project (Project READTECH)**

Project Director: Fisher, Sherrilyn K.

Beginning Date: 10/01/00

Kansas City, Kansas Public Schools USD #500

Ending Date: 9/30/03

625 Minnesota

Kansas City, KS 66101

913-627-5669

Fax Number: 913-627-5688

E-mail: shfishe@gw.kckps.k12.ks.us

Purpose: This collaborative effort among the Kansas City, Kansas (KCK) Public Schools, the Ewing Marion Kauffman Foundation, and the University of Kansas will develop, implement, evaluate, and sustain a professional development program that will further integrate the use of a research-based technology application into the education of at-risk learners and students with disabilities in the middle school environment.

Method: The project will offer: 1) the integration of a multimedia reading program (Scholastic's Anchored Instruction-Based READ 180) into the instruction of general and special education students in seven middle school buildings and one intensive special education program called the Bridges Program; 2) an intensive professional development program; 3) an ongoing and responsive classroom technical assistance program; 4) a collaborative effort with Kansas City Public Schools School-Wide reform efforts including several literacy projects and community partnerships; 5) online staff development to sustain ongoing training and classroom technology implementation beyond the life of the project; and 6) an intensive evaluation program measuring teacher technology use and student outcomes related to literacy.

Products: The seven middle school buildings and the Bridges Program (203 general education and 44 special education teachers) will integrate the READ 180 software program into their reading instruction across both general and special education students. Similarly, an effective staff development program will be implemented to further integrate effective instructional practice, including the use of technology tools to better serve the educational needs of all learners. To complement this training program, the University of Kansas will create an interactive online training program to introduce the READ 180 software and supplement face-to-face teacher training efforts.

Grant Number: H327M000019

Assistive Technology in the Schools

Project Director: Persico, Anthony
Williamsville Central School District
415 Lawrence Bell Dr.
Williamsville, NY 14231-9070
716-626-8007

Fax Number: 716-626-8089

E-mail: apersico@lbd.wmsvcsd.wnyric.org

Beginning Date: 1/01/00

Ending Date: 12/31/03

Purpose: This project will identify, implement, and evaluate research-based approaches for using technology to improve the educational outcomes of elementary students with disabilities in the Williamsville Central School District in western New York.

Method: Within the three-year project, research-based approaches to assistive technology (AT) will be implemented within the six elementary buildings of the district. These methods will meet the unique needs of this suburban district, be systematically integrated into existing structures, and will continue after the project ends. The project will partner with local universities to build the capacity of school district personnel to screen, evaluate, apply, modify, and coordinate elements of successful AT interventions.

Products: The project will develop new, more relevant methods of providing students, parents, teachers, therapists, and school administrators with: 1) access to the ever-expanding knowledge base on educational and assistive technologies; 2) screening and evaluation procedures to address the AT needs of students; and 3) training on the use of AT in the classroom. Knowledge gained will be shared with all school stakeholders: children, teachers, educational aides, administrators, family members, and therapists in western New York as well as across the state and nation.

4.327N

Captioning Films and Video Distribution System*Grant Number:* H327N980001**Captioned Films and Videos Distribution**

Project Director: Stark, Bill
National Association of the Deaf
814 Thayer Avenue
Silver Spring, MD 20910-4500
301-587-1788

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The goal of the Captioned Films/Videos (CFV) Distribution System and the CFV Educational Video Selection and Captioning activity, as mandated by PL 85-905 in 1958, is to provide "enriched educational and cultural experiences through which deaf persons can be brought into better touch with realities of their environment." To meet this critical goal, the National Association of the Deaf will: 1) develop a set of values, a vision, and an operational philosophy that provides guidance, effective communication, and clear direction to depository managers; 2) make management decisions and operational changes based on facts and valid data; 3) provide users with superior products and services that meet and exceed demands; 4) reach out to all eligible users of CFV and create greater satisfaction; and 5) make consumers an integral part of the improvement process. The underlying intent, within the constraints of available resources, is: 1) to provide equal access to cultural and educational opportunities that otherwise would be inaccessible to deaf and hard of hearing individuals and 2) to promote these opportunities through a cost-effective materials loan system.

Method: The project will maintain booking and circulation through a centralized computer booking system; institute "user registration and feedback" procedures to ensure that consumers are able to register as new users with ease and with quick confirmation response; maintain media repair and replacement; provide catalogs and lesson guides in three formats or versions: printed, CD-ROM, and Internet; conduct annual meetings to develop a vision that leads to a condition in captioning that is better than what now exists; and conduct "outreach" which is the marketing process of planning and executing the promotion of CFV products, goods, and services that satisfy consumer needs and CFV program objectives and to extend CFV services to a wider segment of the population including a focus on deaf and hard of hearing members of underserved and minority populations which include the U.S. Hispanic community, Asian Americans, African Americans, Americans over the age of 65, Native Americans, and Asian Pacific Americans. The project will increase services to public schools by identifying schools with deaf and hard of hearing students and providing program information; educating public school personnel about the special needs of their students who have a hearing loss; and educating school personnel about the benefits of using captioned materials. The project will also provide quarterly progress reports.

Products: The NAD will make the following products and information available to consumers. Open-captioned media collections of over 4,000 video titles will be circulated to registered clients through a distribution network, and multimedia offerings will begin. A CFV catalog will be developed annually, printed, and distributed to all clients. "Lesson Guides" will be printed and distributed for each new educational video. A CD-ROM version of the CFV catalog and lesson guides will be distributed. The CFV World Wide Web site will provide an electronic version of the CFV catalog, lesson guides for CFV educational videos, captioning informational and advocacy materials, online user registration capability, and electronic ordering of materials. The Captioning Database service on the CFV Web site will provide information to local school systems and others regarding the availability of open- and closed-captioned media from sources other than CFV.

84.327P

Closed Captioned Sports Programs

Grant Number: H327P000002

Providing English and Spanish Language Real-Time Captioning of Sports

Project Director: Hansel, Mike
Real-Time Captioning Institute, Inc.
16031 Sherman Way
Van Nuys, CA 91406
818-376-0406
Fax Number: 818-376-0416
E-mail: rtc@msn.com

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: This project of Real-Time Captioning (RTC) will provide low-cost closed captions for real-time English-language and Spanish-language televised sports programming. The English-language programs will be televised nationally on the NBC television network and Spanish-language programs will be broadcast on Telemundo, a national Spanish-language network.

Method: RTC will caption almost 400 hours of live sports events for NBC and Telemundo in order to demonstrate the importance of captioning all types of sporting events and to make a greater number of programs accessible to the deaf and hard-of-hearing communities. It will advertise the availability of these captioned programs through community newsletters, publications for the deaf community, other publicity-related events, and the efforts of its consumer advisory board.

Products: This project will meet the needs of the deaf community within the English-language and Spanish-language communities. Some of the events to be captioned will include the Wimbledon competition, the Breeders Cup, Triple Crown horse races, National Basketball Association games, Sportsworld programs, and Futbol Telemundo.

Grant Number: H327P000007

Closed Captioned Sports Programs: Fox and FX

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@VITAC.com

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: This project will allow VITAC to continue to caption a variety of sports programs available to audiences on broadcast and basic-cable television networks. The project will continue the captioning of 754 hours of sports programs in a cost-effective manner.

Method: VITAC will continue and expand the captioning of nationally televised programs that closely match the preferences of the captioning audience. The project will expand private sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers. The project, through its Caption Viewers Advisory Panel, will continue to seek support from the deaf community and to inform the community about the captioning work of the project.

Products: VITAC will continue its live captioning of over 700 hours of Fox Sports program and 54 hours of sports programs on the FX Network. Because of outside funding from the networks whose programs are being captioned, the amount of programming that can be captioned can be increased without an increase of federal funding.

Grant Number: H327P000008

Closed Captioned Sports Programs: NBC, USA, Global, and RHS

Project Director: Karlovits, Joseph R.

VITAC Corporation

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

Fax Number: 724-514-4111

E-mail: Joe-K@VITAC.com

Beginning Date: 10/01/00

Ending Date: 9/30/03

Purpose: This project will caption a variety of sports programs available to audiences on broadcast and basic-cable television networks, thus meeting a daily need of millions of American citizens who have not had access to the spoken narrative of televised sports programs.

Method: This project will provide sports captioning on the following networks: NBC Sports, USA Network sports, the EC Sports Network, and the Global Sports Network. It will continue and expand the captioning of nationally televised programs that closely match preferences of the captioning audience, expand private-sector support for captioned programs by using federal funds as an inducement to increase funding support from program producers, and continue to seek input from the deaf community through VITAC's Caption Viewers Advisory Panel and to inform the deaf community about this project.

Products: The project will continue the following annual captioning capacities: 316 hours of NBC sports programs, more than 75 hours of sports on the USA Network, 142 hours on the EC Sports Network, and 13 hours on the Global Sports Network.

Grant Number: H327P000012

Closed Captioned Sports Programs: NFL Films

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@VITAC.com

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: Through this project, VITAC will caption a series of programs about professional football produced by NFL Films. These timely pieces will be made available to audiences on broadcast and basic-cable networks.

Method: The project will expand the capability of VITAC to caption nationally televised programs that closely match preferences of the captioning audience. Through its Caption Viewers Advisory Panel, VITAC will continue to seek input from the deaf community and inform that community about this project.

Products: VITAC will annually caption 346 programs produced by NFL Films, which amounts to over 220 hours of film. NFL Films will offer support to help fund caption preparation and off-line encoding costs, which will increase the amount of programming that can be captioned.

Grant Number: H327P000014

Closed Captioned Sports Programs: Fox and Turner

Project Director: Okrand, Marc
National Captioning Institute, Inc.
1900 Gallows Road
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: mokrand@ncicap.org

Beginning Date: 10/01/00
Ending Date: 9/30/03

Purpose: This project of the National Captioning Institute (NCI) will involve a collaboration with the Turner Entertainment Network and the Fox Broadcasting Company to provide 343 hours of closed-captioning services for basketball games and other sports programming. The project will increase the availability of closed-captioned sports programming for people who are deaf or hard of hearing, including teens and Spanish-speaking populations.

Method: The project will provide almost 325 hours of captioning each grant year for National Basketball Association pre-season and regular season games, and playoffs airing on TBS and TNT (Turner networks). Fox will help caption 20 hours of sports programs each year. The Fox shows are targeted to youth ages 12 to 17. Captioning will be done off-line in real time.

Products: In all, this project will offer captions for almost 400 hours of sports programming annually to as many as 100 million households.

84.327R Recording for the Blind

Grant Number: H327R980001

Accessible Formats for Educational Materials

Project Director: Kelly, John

Recording for the Blind and Dyslexic, Inc.

20 Roszel Road

Princeton, NJ 08540

609-520-8014

Website: <http://www.rfbid.org/>

Beginning Date: 10/01/98

Ending Date: 6/30/01

Purpose: This project of Recording for the Blind and Dyslexic (RFB&D) will provide accessible formats of textbooks and other educational materials to print-disabled students (elementary, secondary, postsecondary, and graduate) by recording, producing, duplicating, and distributing accessible versions (analog and digital audio and digital text) of printed textbooks.

Method: RFB&D will handle requests for educational materials from students who are visually or print-disabled at all educational levels. It will coordinate and collaborate with publishers, software developers, other manufacturers of accessible materials for individuals who are visually impaired or otherwise print disabled, disability and educational organizations, and government agencies to ensure effective coordination and nonduplication of its efforts in the production of these materials. The project will use new technology, such as electronic text or digital audio synchronization, to produce and distribute the materials in accessible formats.

Products: RFB&D will record a minimum of 3,000 additional texts for use by print-disabled individuals and for inclusion in its 77,000 master tape library. It will also explore CD-ROM and network distribution of its materials. These tapes will be supplied on an on-loan basis to qualified individuals. It will disseminate its materials via catalogues and other publications, and at conferences and meetings. The materials are intended to help provide equal educational opportunities to print-disabled students and lessen some of the barriers they face in classrooms.

84.327S

Closed-Captioned Daytime Television Programs*Grant Number: H327S980002***Closed Captioned Daytime Television Programming**

Project Director: Spellman, Jack
WGBH Educational Foundation
The Caption Center
125 Western Avenue
Boston, MA 02134
617-492-9225

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will continue the success of the existing daytime programming closed-captioning cooperative agreement by ensuring that all programs currently captioned remain accessible. The project will also broaden the number of channels and the types of programs made accessible while reducing the overall rate per program hour.

Method: The Caption Center will reflect program choices of deaf and hard-of-hearing viewers, utilize the highest quality captioning standards and professional experience, provide captions on 606.5 hours of programs each year, and offer an extremely competitive rate. The project will ensure a wide selection of programming in syndication and on 11 cable networks including: Bravo, The Discovery Channel, Home & Garden Television (HGTV), The Learning Channel, Lifetime, MTV, Odyssey, Sci-Fi Channel, The Travel Channel, USA Network, VH-1, and programming syndicated by Hearst Entertainment and the American Program Service. Through this project, The Caption Center is addressing a constant need among caption consumers: the still serious lack of captioning available on cable. The Center's Consumer Council feedback will continue to address and improve captioning methodology, style, delivery, and promotion.

Products: The major product of this project is captioning of 606.5 hours of programs each year. Results from this project will be made available, openly and without proprietary protections, to all interested parties—through direct broadcast satellites, pay-per-view, fiber optics, and other delivery media. Project staff will make every effort to ensure that the captions created for the initial release of the program will be made available for second releases such as home video or other broadcast venue. Recommended practice documents, including information on emerging standards of Digital Television, will be made freely available through the project's publications: Caption Center News, TechFacts, and the Consumer Information Series. Other dissemination efforts include: mailings, the World Wide Web, regional and national committees serving several communities which benefit captioning, presentations at professional organizations, and local outreach efforts initiated by project staff.

Grant Number: H327S980004**Closed Captioned Daytime Television**

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317
724-514-4040

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is to assure the quality captioning televised daytime programming; to caption nationally televised programs which closely match preferences of the captioning audience; to expand private sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers; and to continue to seek input from the deaf community through VITAC's Caption Viewer Advisory Panel.

Method: The project will provide the key elements in producing high-quality captions—appropriate staffing, advance research, quality-assurance procedures, state-of-the-art facilities, and refined captioning methods. VITAC will provide a minimum of 40% of captioned programming funding from producers and distributors and offers a three-year commitment of captioned programming funded by the private sector that represents 52% of the total hours. The project ensures that all daytime dramas currently captioned with support by federal funds will continue to be broadcast accessibly, such as "The Young And The Restless," "Days Of Our Lives," "The Bold And The Beautiful," "Sunset Beach," "Home Matters," "Men In Toolbelts," and "Next Door With Katie Brown." VITAC will expand captioned daytime programs to include a new offering from popular talk host Maury Povich. Universal Studios will agree to pay 40% of the captioning costs of the Povich program during the three-year project and it will be live encoded.

Products: The major product of this project will be captioning of approximately 3,939 hours of televised daytime programming over the three-year project period. To promote the project, VITAC publishes a quarterly newsletter called "Verbatim"; produces press announcements regularly carried in publications aimed at the deaf community and the television industry; obtains a media distribution list including more than 140 newspaper, magazine, television, and radio outlets across the country; and has a web site available to consumers (www.vitac.com) to inform the public of the programs captioned under this agreement.

Grant Number: H327S980008**Closed Captioned Daytime Programming Fox News Channel**

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Rd Suite 310
Carlsbad, CA 92009
760-431-2882

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will provide deaf and hard-of hearing viewers with captioned, live breaking news during daytime hours, by supplying stenographic realtime and live-display captioning services from Fox News Channel news programming.

Method: The project offers cost-effective, quality captioning which will be provided at a cost of \$166.06 per hour for federal funding. Viewers of Fox News Channel, which reaches almost 29 million homes, will have captioning of Fox's programming, which features in-depth live news coverage of world events during key daytime hours. Private sector contributions of \$94,974 from Fox in year one and an additional \$31,404 in year one from

Media Captioning Services (MCS) represent a combined contribution equal to 26% of total project costs in year one to supplement federal funds.

Products: Continuous captioning will be provided from 9:00 a.m. to 5:00 p.m. weekdays, for a total of 2,080 weekday hours per annum. MCS will work with deaf organizations who have been supportive such as Self Help for Hard of Hearing People, Inc. (SHHH), A.G. Bell, and National Association of the Deaf (NAD) in disseminating information and providing feedback to MCS's consumer feedback consultant. MCS will make presentations at conventions; develop a World Wide Web site that will allow for customized quotations to be given to stations/video programmers for realtime captioning of their programming; and disseminate information about Captioning/Fox News Channel project activities through the Web page. Visitors to the Web site will be able to determine what events are being captioned on Fox News Channel and access live interviews with key decision makers, with links to Fox News Channel's home page to view a transcript and post guest comments.

Grant Number: H327S980009

Closed Captioned Daytime Programming

Project Director: Ferrier, Patricia
Media Captioning Services
2141 Palomar Airport Road Suite 310
Carlsbad, CA 92009
760-431-2882

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: This project will provide stenographic realtime and live display captioning services on CNN (Cable News Network) daytime news programming.

Method: Key features of this project include maintaining the captioning of 2,314 hours per annum of CNN's daytime programming, and expanding captioning by 130 additional weekend hours, for a total of 2,444 hours. Cost-effective, quality captioning will be provided at a cost of \$142.81 per hour, 15% less than the previous cost of \$168.71 to the federal government under the current daytime award and 38% less than the federal cost of \$230.77 per hour six years ago. This project has obtained a combined private sector contribution equal to 20% of the total per annum project cost.

Products: Viewers of CNN, which reaches 74 million homes, will have captioning of 2,444 hours of CNN's daytime programming, featuring in-depth news coverage, live breaking news, and specialized daily reports on business, finance, medicine, and science. Media Captioning Services (MCS) will work with deaf organizations that have been supportive such as Self Help for Hard of Hearing People, Inc. (SHHH), A.G. Bell, and National Association of the Deaf (NAD) in disseminating information and providing feedback through the project's consumer feedback consultant. MCS will make presentations at conventions and will develop a World Wide Web page to allow for customized quotations to be given to stations/video programmers for realtime captioning of their programming. The Web site will provide capability for visitors to determine what events are being captioned on CNN, read summaries of significant events, view live interviews with key decision makers (with links to CNN's home page to view a transcript), and leave their comments on project captioning. Chat room capability will also be available.

84.327T

Cultural Experiences for Deaf or Hard of Hearing Individuals

Grant Number: H327T980004

The Impact of Theatrical Experiences on the Total Development of the Child Who Is Deaf or Hard of Hearing

Project Director: Scherer, Patricia
International Center on Deafness and the Arts
3444 Dundee Rd.
Northbrook, IL 60062
847-559-0110

Beginning Date: 10/01/98

Ending Date: 9/30/01

Purpose: The purpose of this project is to provide training, knowledge, and skill development that will lead to enhancement of theatrical experiences irrespective of hearing status or cultural background. In addition, the project develops awareness and appreciation by the hearing public of artistic contributions to society by deaf and hard of hearing individuals.

Method: The following activities will be conducted over a three-year period: 1) an annual professional adult play with parts for children, such as "The Wizard of Oz"; 2) an annual children's play for children ages six years through high school; 3) a Participant Theatre, which presents a professional play, based on children's literature, that provides opportunities for children in the audience to participate and improvise and that provides learning packets (in English, Spanish, or Braille) sent to target schools prior to the play; and 4) a series of workshops designed to teach children about American Sign Language and its artistic applications, as well as the artistic contributions to society by the deaf community. As a result of these activities, children are expected to receive: 1) training and role models in all aspects of theater by professional adults who are deaf, hard of hearing, and hearing; 2) development of cognitive, artistic, and social skills; and 3) knowledge of children's literature, American Sign Language, and its application to the arts as well as the process of appreciating and evaluating literature and the performing arts. Children and adults who are deaf and hard of hearing will participate in every aspect of the project. Children's play directors will be deaf and hard of hearing. The activities will occur in public, private, and residential schools in inner city and suburban areas, thereby providing the base for ethnic and cultural diversity. The Children's Theatre currently has African American, Asian, Indian, Hispanic, and Caucasian members.

Products: The primary products will be the plays, workshops, and learning materials. In addition, presentations will be given at state and national conferences to disseminate the results of this project.

Grant Number: H327T980008

OPTICA: Our Path: Together Initiating Cultural Access

Project Director: Jackson, Susan
 Illuminations...Theatre with the Deaf
 Optica Program
 1475 West Gray
 Houston, TX 77019
 713-529-8692

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The "Our Path: Together Initiating Culture Access" (OPTICA) program unites all adults and children with hearing loss in artistic expression and creates accommodations media for communicating cross-culturally. The program fosters cooperation and learning for both American Sign Language and Hard of Hearing people so that they can share their cultures as well as build teams to open doors to all arts/culture/heritage in the hearing community. "Total Accommodation" (interpreters, captioning, and assistive learning devices) is provided for every activity, and all populations with hearing loss are included so that they can learn more about each other and share in the experience and understanding of deaf culture. Total Accommodation products are created and disseminated by and for people with hearing loss to show the community how to provide complete access and to demonstrate their competency and creativity to the hearing community.

Method: The program has three developmental steps. The first step is to teach American Sign Language theatrical presentation to adults and children. Concurrently, there are classes in video filming to develop skills of adults and youth so that they can promote their events and culture. In addition, there will be a class for the non-actor in theater crafts (costuming, sets, lighting, etc.). The children's theater day camp, focusing on the arts, opens doors to the full diversity of children with hearing loss. Recreational activities are included, and a summer play climaxes the camp session. The children's camp is repeated each year with talented youth being encouraged to audition for "Illuminations" regular productions. In phase two, the theatrical classes become more advanced. Plays, awareness spots, access tapes for hearing theater and museums, and advertising videos are made and tested within the hearing loss community. The adults from the classes will "star" in the tapes and create a production for the community.

Products: In the last phase of the project, the advanced groups will take the "deaf-tested" videos to the hearing community for evaluation. Materials they develop and test will be disseminated within the community and nationally to demonstrate that there are cost-effective methods for providing accommodation to all people with hearing loss in all places at all times. Museums and theaters are the primary targets. Public television will air a play, written by a person with hearing loss. The participants (actors, directors, crew) will be people with hearing loss. Tape clips of activities that show OPTICA in action will be assembled and disseminated. A panel discussion about experiences in promoting access and cultural differences will be videotaped for public television.

Grant Number: H327T980011

Instant Theater Residencies

Project Director: Weir, Aaron; Thackaberry, Neil
 Cleveland Signstage Theatre
 8500 Euclid Ave.
 Cleveland, OH 44106
 216-229-2838

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The Cleveland Signstage Theatre (formerly Fairmount Theatre of the Deaf) will continue the "Instant Theater" Residency project by encouraging joint participation by individuals who are deaf and individuals who

are hearing, both youth and adults, in the production and presentation of theater performances in high schools and community theaters. The goals of this project include the creation of a cultural opportunity for students and adults, deaf and hearing, to produce live theatre performances under professional direction; and the enhancement of self-worth of mainstreamed deaf students who attend regular schools.

Method: These goals will be accomplished through a series of workshops, classes, rehearsals, and performances conducted during two, eight-week residencies by Cleveland Signstage Theatre. The target population is primarily deaf students attending regular high schools. A secondary target is deaf adults in the same communities that host the chosen community theaters. The project will provide a cultural opportunity for students who are frequently isolated from the general student population. The adults participating will have the opportunity to form new social contacts and to participate in an art form that has traditionally not been available to them. The results of the project will be an intense cultural experience for 120 students and 60 adults, and an opportunity for 1,200 students and 3,200 adults to see individuals who are deaf perform in local theater productions. The project also includes professional development for teachers, actors, and directors so that opportunities for deaf participation will continue after the project's completion.

Products: Documentation of the process will be both in writing and in video tape. A practical "how to" manual will be developed to assist other schools and community theaters in opening their operations to participation by individuals who are deaf. Private sector funds will be solicited for free distribution of documentation to other institutions and individuals; otherwise documentation will be made available for the cost of duplication and shipping.

Grant Number: H327T980015

**A Comprehensive Program of Professional Sign Language
Theatre Productions and Educational Outreach Workshop**

Project Director: Waterstreet, Ed
Deaf West Theatre Co., Inc
5112 Lankershim Blvd.
North Hollywood, CA 91601
818-762-2998

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of this project is to preserve and expand a comprehensive program of cultural experiences for deaf and hard-of-hearing adults and children. The primary objective is to provide deaf and hard-of-hearing artists and audiences of all ages a cultural home—a place to discover their talent; cultivate their skills; develop self-esteem and cultural pride through role models, training, and employment; explore current issues; and perpetuate deaf culture.

Method: The project will produce a minimum of two professionally produced plays per year and provide theatre education and drama experiences, such as a series of three 12-week drama workshops, for children enrolled in target school programs in southern California. Crucial to the program is the cross-cultural melding of deaf and hearing worlds and the inclusion of members of ethnic and minority groups. The project's school partnerships will be a mechanism for outreach to parents and individuals interested in children's theatre.

Products: The primary products will be the professionally produced plays and the drama workshops.

Grant Number: H327T980019

Dreams to Sign

Project Director: Fogel, Bonnie; Yeh, Mary Gibbs
Bethesda Academy of Performing Arts Deaf Access Program
7300 Whittier Blvd.
Bethesda, MD 20817
301-320-2550

Beginning Date: 10/01/98
Ending Date: 9/30/01

Purpose: The purpose of the Dreams to Sign project is to expand the six-year foundation laid by the Bethesda Academy of Performing Arts (BAPA) Deaf Access Program, which provides quality cultural experiences by and for integrated deaf, hard of hearing, and hearing teenage performing arts companies and by integrated companies of deaf and hearing adults.

Method: Dreams to Sign will accomplish this via the following activities: 1) upgrading the production values of BAPA's teen companies' productions so that the videos will reflect qualities appropriate for wider dissemination; 2) producing videos of the performances and a documentary of the rehearsal process through a partnership with Stage II Communications; 3) creating an original play to be performed by an integrated professional adult company that will travel to schools and community venues on a year-round basis building public awareness by showcasing the artistic and intellectual achievements of deaf individuals; 4) disseminating information to others in a position to emulate BAPA's work with the deaf community through a partnership with Cable TV Montgomery and Sprint/Maryland Relay; and 5) providing quantitative data on the growth of public awareness as a result of this initiative by designing evaluation tools to test public reaction in three settings through a partnership with NOVA Research Company.

Products: Dreams to Sign will collaborate with Woodbine Press, who will publish a book titled Dreams to Sign as a result of this initiative. A World Wide Web page will be created and maintained to provide a constant, updated source of information on all aspects of the program. Sprint/Maryland Relay will utilize the Dreams to Sign documentary and production videos at their presentations to businesses, agencies, nonprofit organizations, and medical and health-related organizations; and the project will be promoted through Sprint/Maryland Relay "Today" quarterly newsletters. Training workshops on deaf culture, American Sign Language, and Sprint/Maryland Relay projects will be conducted. Videos of the teen company productions will be cablecast on Cable TV Montgomery and/or Montgomery Community Television.

84.327U

Closed Captioned Television Programs

Grant Number: H327U990001

Closed Captioned Television Programs Syndicated Programs

Project Director: Idoni, Linda; Wooton, William

Beginning Date: 10/01/99

WGBH Educational Foundation

Ending Date: 9/30/02

The Caption Center

125 Western Avenue

Boston, MA 02134

818-562-3344

Fax Number: 818-562-3388

E-mail: Linda_Idoni@wgbh.org

Purpose: The Caption Center, a nonprofit service of the WGBH Educational Foundation, will closed caption approximately 339.5 hours annually of nationally syndicated classic, or "evergreen," television programming for the benefit of the nation's deaf and hard-of-hearing audience. This project will increase the availability of a wide range of closed captioned syndicated "evergreen" television programs which are enjoyed by individuals who are deaf or hard of hearing and their families. In addition to providing access to syndicated programs for this population, this project also makes it possible for individuals who can hear to enhance their literacy skills whether they are just learning to read, or are native speakers of other languages who are learning English as a second language.

Method: The Caption Center will produce captions in its Los Angeles facility, with additional staff and technical resources available at its Boston and New York facilities. All three offices are fully equipped and all personnel are in place so that The Caption Center can begin captioning programming at once. The caption-viewing audience will continue to communicate with this project via e-mail, letters, phone calls, TTY, and Internet bulletin boards.

Grant Number: H327U990002

Closed Captioned Television Programs National News & Public Information ABC and CBS Networks

Project Director: Karlovits, Joseph

Beginning Date: 10/01/99

VITAC Corporation

Ending Date: 9/30/02

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

Fax Number: 724-514-4111

E-mail: Joe-K@vitac.com

Purpose: VITAC will caption a variety of national news programs available to audiences on two broadcast-television networks: ABC and CBS.

Method: The objectives throughout the three years of the project are the following: 1) to continue the quality captioning of ABC News and CBS news programs, special reports, and emergency coverage; 2) to continue and expand the captioning of nationally televised programs which closely match preferences of the captioning audience; 3) to expand private sector support for captioned programming by using federal funds as an inducement to increase funding support from program producers; and 4) to continue to seek input from the deaf community through VITAC's Caption Viewers Advisory Panel, and to inform the deaf community about this project.

Products: The project will provide closed captioned television programming which has become a part of the daily routine for millions of citizens who are deaf and hard-of-hearing. It will continue to be the primary source of news, information, and entertainment for many people, and a cultural experience which hearing and non-hearing members of the same family can share on equal footing.

Grant Number: H327U990003

Closed Captioned Television Programs Children's Programs

Project Director: Karlovits, Joseph
VITAC Corporation
101 Hillpointe Drive
Canonsburg, PA 15317-9503
724-514-4000
Fax Number: 724-514-4111
E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: This project will provide deaf and hard-of-hearing Americans with access to hundreds of hours of TV series for children being released nationally. VITAC's specific objectives are: 1) to assure the quality captioning of 220 hours of children's TV programs in Year One of the project; 2) to expand the captioning of nationally televised programs which closely match preferences of the captioning audience; 3) to expand private sector support for captioning programming by using federal funds as an inducement to increase funding support from program producers; and 4) to continue to seek input from the deaf community through VITAC's Caption Viewers Advisory Panel, and to inform the deaf community about this project.

Method: VITAC will caption a wide variety of first-run children's programs available to national TV audiences. Programming will be captioned from FOX Children's Network. Programs such as "The Magic School Bus," "Life with Louie," and "Goosebumps" will be captioned. Additional programming will be captioned from The Program Exchange: Space Kidettes and King Leonardo.

Products: The children's programs captioned by this project are primarily designed to entertain; however many programs are also designed to educate. The ability of deaf students to compete will be increased because they will have access to the same powerful tools as their hearing counterparts.

*Grant Number: H327U990004***Closed Captioned Television Programs Children's Programs**

*Project Director: Karlovits, Joseph R.**Beginning Date: 10/01/99*

VITAC Corporation

Ending Date: 9/30/02

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

*Fax Number: 724-514-4111**E-mail: Joe-K@vitac.com*

Purpose: Through this project, and with support from four major distributors of children's programming, VITAC will caption new children's television programs and reformat repeat programs.

Method: In the first year of the project, VITAC will caption over 170 hours of new children's television programs. VITAC has obtained support from the four distributors of programs which will enable it to greatly increase the amount of programming which can be captioned. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style.

Products: In addition to providing thousands of hours of captioning for the children's programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances by spokespersons.

*Grant Number: H327U990005***Closed Captioned Television Programs Syndicated Television Programming**

*Project Director: Karlovits, Joseph R.**Beginning Date: 10/01/99*

VITAC Corporation

Ending Date: 9/30/02

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

*Fax Number: 724-514-4111**E-mail: Joe-K@vitac.com*

Purpose: This project will allow VITAC to caption a variety of "evergreen" classic programs available to audiences through syndication, allowing them access to this cultural experience and allowing both hearing and non-hearing individuals to experience it on equal footing.

Method: In the first year of the project, VITAC will caption over 350 hours of classic television programs. VITAC has obtained support from three major distributors of syndicated programs which will enable it to greatly increase the amount of programming which can be captioned. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style and will be done with sensitivity to non-dialogue concerns such as music, sound effects, and even silences; the overall goal will be for the non-hearing viewer to get the same information and emotional experience as the hearing viewer.

Products: In addition to providing thousands of hours of captioning for the "evergreen" programs, VITAC will inform the deaf community of its services via newsletters, press releases, a web site, and personal appearances by spokespersons.

Grant Number: H327U990006

**Closed Captioned Television Programs National News &
Public Information CNN Headline News**

Project Director: Karlovits, Joseph R.

VITAC Corporation

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

Fax Number: 724-514-4111

E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99

Ending Date: 9/30/02

Purpose: Through this project, VITAC will caption over 5,700 hours of CNN Headline News and continue to expand the captioning of nationally televised programming that closely matches the preferences of the captioning audience.

Method: In the first year of the project, VITAC will caption over 110 hours each week of CNN Headline News' round-the-clock news coverage available to cable television audiences. It will expand private-sector support for captioned programming by seeking private support to ensure that the amount of captioned programming remains constant. All of the programs will be captioned in "pop-on" style.

Products: In addition to providing thousands of hours of captioning for Headline News programs, VITAC will inform the deaf community of its services via newsletters, press releases, a Web site, and personal appearances.

Grant Number: H327U990007

Closed Captioned Television Programs: National News and Public Information

Project Director: Karlovits, Joseph R.

VITAC Corporation

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

Fax Number: 724-514-4111

E-mail: Joe-K@vitac.com

Beginning Date: 10/01/99

Ending Date: 9/30/02

Purpose: Through this project, VITAC will close-caption the full variety of national news programs available to audiences on the NBC network.

Method: Each year, VITAC will continue to caption over 1,600 hours of NBC news, special reports, and emergency coverage on NBC.

Products: This grant will meet the urgent daily needs of millions of American citizens who are deaf or hard of hearing to have access to televised news reporting. The project will continue to seek input from the deaf community about preferences and it will inform the community of its services through its advisory panel, newsletters, a web site, and spokespersons.

Grant Number: H327U990008

Closed Captioned Television Programs: Syndicated Television Programming

Project Director: Karlovits, Joseph R.

Beginning Date: 10/01/99

VITAC Corporation

Ending Date: 9/30/02

101 Hillpointe Drive

Canonsburg, PA 15317-9503

724-514-4000

Fax Number: 724-514-4111

E-mail: Joe-K@vitac.com

Purpose: Through this project, VITAC will caption a variety of "evergreen" classic television programs made available to audiences through syndication.

Method: In the first year of the project, VITAC will caption over 450 hours of classic television programs. It will work to expand the captioning of nationally televised programs based on the preferences of the captioning audience and it will expand private-sector support for captioned programming. All of the programs will be captioned in "pop-on" style.

Products: In addition to providing thousands of hours of captioning for the "evergreen" programs, VITAC will inform the deaf community of its services via newsletters, press releases, a Web site, and personal appearances by spokespersons.

Grant Number: H327U990009

Closed Captioned Television Programs: Children's Programs

Project Director: Wooton, William; Idoni, Linda

Beginning Date: 10/01/99

WGBH Educational Foundation

Ending Date: 9/30/02

The Caption Center

125 Western Avenue

Boston, MA 01234

818-562-3344

Fax Number: 818-562-3388

E-mail: Linda_Idoni@wgbh.org

Purpose: This project of The Caption Center will continue and expand the availability of closed captioned children's programming. It will maintain quality standards and refine its captioning operation to ensure the accurate transmission of caption data for all major feeds, whether pre-recorded or automatic live-encoded.

Method: The project will caption 411 hours annually of the most popular children's programming. Program currently captioned will continue without interruption and new programs will be selected on the basis of their popularity and availability. Partnerships will be established with producers of children's programming on broadcast and cable television.

Products: The life of the programs captioned through this project will be extended through "after market" caption data: subsequent broadcast, online services, and distribution through home video, CD-ROM, and DVD. The project will also aggressively promote the benefit of captioned children's programs to the traditional deaf and hard-of-hearing audiences, as well as to new audiences, including children learning to read or struggling to learn English.

Grant Number: H327U990010

Closed Captioned Television Programs: National News and Public Information

Project Director: Spellman, Jack

WGBH Educational Foundation

The Caption Center

125 Western Avenue

Boston, MA 02134

617-492-9225

Fax Number: 617-562-0590

E-mail: Jack_Spellman@wgbh.org

Beginning Date: 10/01/99

Ending Date: 9/30/02

Purpose: Through this project, The Caption Center will continue its mission of providing the widest possible access to television and video for deaf and hard-of-hearing people by captioning national newscasts, public information programming, and emergency programming on broadcast and cable networks, while maintaining or enhancing the quality of captioning on those programs.

Method: This project will allow The Caption Center to continue uninterrupted captioning coverage of news and public information programming on CBS, PBS, A&E, and Knowledge TV and to continue to set quality and service standards for audiences and the captioning industry. Through the project, over 1800 hours of news programming and emergency coverage each year will be captioned.

Products: During the project, in addition to the captioned programming, The Caption Center will provide various outreach activities to promote the availability of captioned news and public information programs, and to build awareness of the service and the availability of The Caption Center's resources.

Grant Number: H327U990013

Closed Captioned News and Public Information - Two

Project Director: Orphan, David

National Captioning Institute, Inc.

1900 Gallows Road Suite 3000

Vienna, VA 22182-3865

703-917-7600

Fax Number: 703-917-9878

E-mail: orphan@ncicap.org

Beginning Date: 10/01/99

Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with three major television news networks, will close-caption a selection of national news and public information programs over a three-year period, increasing the availability of closed-captioned national news and public information programs.

Method: The project will select a mix of news and public information programs for captioning that meets the diverse cultural and educational interests of deaf and hard-of-hearing consumers by identifying their needs and establishing close working partnerships with broadcasters. Fifty percent of the costs of captioning these shows will be shared by the collaborating producers and networks, showing their commitment to making television accessible to people who are deaf or hard of hearing. Captioning will be done using real-time and live-display technologies.

Products: As a result of this project, a wide range of news and public information programs will be made accessible to people who are deaf or hard of hearing. The applications of captioned TV and videos will extend

beyond the deaf community to other populations: young children learning to read, remedial readers, children and adults with learning disabilities, illiterate adults, and those learning English as a second language.

Grant Number: H327U990014

Closed Captioned Children's Television - Two

Project Director: Thomas, Yvonne; Orphan, David; Gray, Stephanie

Beginning Date: 10/01/99

National Captioning Institute, Inc.

Ending Date: 9/30/02

1900 Gallows Road, Suite 3000

Vienna, VA 22182-9878

703-917-7600

Fax Number: 703-917-9878

E-mail: orphan@ncicap.org

Purpose: The National Captioning Institute (NCI), in collaboration with five major producers and broadcasters of children's television programs, will close-caption a variety of children's programs to increase the availability of closed-captioned programming for children who are deaf and hard of hearing and their families.

Method: NCI has combined children's television programs from five major networks and companies to create a mix of captioned shows that is intended to meet the diverse educational, cultural, and entertainment interests of children who are deaf and hard of hearing. The shows will include various "Cable in the Classroom" programs as well as cartoons and other original programs. Costs of captioning these shows will be shared by the collaborating producers and networks, evidence of their commitment to making television shows more accessible to children.

Products: Each year of the project, over 500 hours of children's programming will be captioned. The availability of captioned children's programs that will result from this project will add to the resources available to support the application of captioned TV in reading and literacy education.

Grant Number: H327U990016

Closed Captioned News and Information - One

Project Director: Okrand, Marc; Orphan, David

Beginning Date: 10/01/99

National Captioning Institute, Inc.

Ending Date: 9/30/02

1900 Gallows Road, Suite 3000

Vienna, VA 22182-3865

703-917-7600

Fax Number: 703-917-9878

E-mail: orphan@ncicap.org

Purpose: The National Captioning Institute (NCI), in collaboration with a variety of television news producers and broadcasters, will close-caption hours of national news and public information programs over a three-year period, increasing the availability of closed captioned national news and public information programs.

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Method: The project will select a mix of news and public information programs for captioning that meets the diverse cultural and educational interests of deaf and hard-of-hearing consumers by identifying their needs and establishing close working partnerships with broadcasters. The costs of captioning these shows will be shared by the collaborating producers and networks, showing their commitment to making television accessible to people who are deaf or hard of hearing. Captioning will be done using real-time and live-display technologies.

Products: As a result of this project, a wide range of news and public information programs will be made accessible to people who are deaf or hard of hearing. The applications of captioned TV and videos will extend beyond the deaf community to other populations: young children learning to read, remedial readers, children and adults with learning disabilities, illiterate adults, and those learning English as a second language. All told, about 100 million Americans can benefit from captioned television.

Grant Number: H327U990017

Closed Captioned Syndicated Television

Project Director: Orphan, David; Lorenz, Martha; Helminiak, Jeff
National Captioning Institute, Inc.
1900 Gallows Road, Suite 3000
Vienna, VA 22182-3865
703-917-7600
Fax Number: 703-917-9878
E-mail: orphan@ncicap.org

Beginning Date: 10/01/99

Ending Date: 9/30/02

Purpose: The National Captioning Institute (NCI), in collaboration with seven major television producers and broadcasters, will complete closed-captioning of more than 831 hours of syndicated off-network or "evergreen" television programs over the three-year period of the grant.

Method: NCI has combined programs from the various networks and companies to create a mix of captioned shows that is intended to meet the diverse cultural and entertainment interests of viewers. As a result of this project, a wide range of off-network and popular, previously broadcast programs or series with long shelf lives will be made accessible to people who are deaf or hard of hearing. To deliver cost-effective captioning services, NCI will use prerecorded production methods and establish funding partnerships with broadcasters to share the cost of captioning to make television accessible to people who are deaf or hard of hearing.

Products: This project will increase the availability of syndicated television programs for people who are deaf or hard of hearing. Approximately 217 hours of syndicated programming will be captioned each year of the project.

Grant Number: H327U990018**Closed Captioned Children's Television - One**

Project Director: Thomas, Yvonne; Orphan, David; Gray, Stephanie*Beginning Date:* 10/01/99

National Captioning Institute, Inc.

Ending Date: 9/30/02

1900 Gallows Road, Suite 3000

Vienna, VA 22182-3865

703-917-7600

Fax Number: 703-917-9878*E-mail:* orphan@ncicap.org

Purpose: The National Captioning Institute (NCI), in collaboration with six major producers and broadcasters of children's television programs, will caption a variety of children's programs.

Method: NCI will work with various companies producing television programs for children to create a mix of captioned shows intended to meet the diverse educational, cultural, and entertainment interests of children. The programs to be made accessible to children who are deaf or hard of hearing range from classic children's shows to serial favorites and cartoons.

Products: This project will increase the availability of closed-captioned programming for children who are deaf or hard of hearing. These captioned children's programs will add to the programs available to support the application of captioned TV in reading and literacy education.

Grant Number: H327U990019**Closed Captioning of Children's Programs**

Project Director: Duckler, Max*Beginning Date:* 10/01/99

CaptionMax, Inc.

Ending Date: 9/30/02

530 N. 3rd Street

Minneapolis, MN 55401-1252

612-341-3566

Fax Number: 612-341-2345*E-mail:* max@captionmax.com

Purpose: CaptionMax, Inc. will provide quality off-line "pop-on" style captioning for popular children's programs shown on commercial and public broadcast and cable networks, so that children who are deaf or hard of hearing will have access to these programs.

Method: The project will caption two popular and non-commercial programs on The Learning Channel, aimed at children ages 4-8. The aim is to allow the children to gain the ability to read the captions along with the action on the screen to reinforce the development of their language skills. Closed-captioning will be provided for 92 commercial-free, half-hour programs each year, enabling programs in The Learning Channel's "Ready, Set, Learn" time block to be accessible to deaf and hard-of-hearing children and their families.

Products: Based on The Learning Channel's level of 80 million subscribers, closed captioning of the two shows will make them available to 8 million deaf and hard-of-hearing individuals and 9.6 million viewers who use English as a second language. To make sure that the target audience is reached, Discovery Communications, their existing advertising/promotional department, and CaptionMax will market the programs captioned through this project.

Grant Number: H327U990020

Closed Captioning of Syndicated Television Programming

Project Director: Duckler, Max
CaptionMax, Inc.
530 N. 3rd Street
Minneapolis, MN 55401-1252
612-341-3566
Fax Number: 612-341-2345
E-mail: max@captionmax.com

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: CaptionMax, Inc., will provide quality off-line, "pop-on" style captioning for popular, previously broadcast syndicated television programming.

Method: Working with The Arts and Entertainment Network, CaptionMax will caption 150 hour-long episodes of television programs enjoying lasting popularity.

Products: By captioning these syndicated television programs, this project will make a variety of never-before captioned programs accessible to the large deaf and hard-of-hearing population, which will enable them to directly experience an important part of community life. In addition, by close-captioning these programs, the 30 million Americans for whom English is a second language can use this as a means of improving their language skills, while also benefiting from the subject matter offered.

Grant Number: H327U990022

Closed Captioned National News Programming

Project Director: Ferrier, Patricia; Pettinato, Richard
Media Captioning Services
2141 Palomar Airport Road, Suite 310
Carlsbad, CA 92009-1426
760-431-2882
Fax Number: 760-431-8735
E-mail: mediacap4@earthlink.net

Beginning Date: 10/01/99
Ending Date: 9/30/02

Purpose: Media Captioning Services will provide stenographic realtime and live-display captioning services on CNN's national news programming.

Method: Each year of the project, 520 hours of CNN's national news programming will be captioned, including in-depth news coverage, live breaking news, and specialized daily reports on business, finance, medicine, and science.

Products: Through this project, deaf and hard-of-hearing viewers will be able to keep well-informed via CNN's programming throughout the critical time periods of 5-6 and 10-11 in the evening.

Contracts

Contract Number: ED99PO4642

Individualized Career Planning and Preparation System

Project Director: Vitkus, Philip J.
Wizdom Systems, Inc.
1300 Iroquois Ave., Suite 140
Naperville, IL 60563
630-357-3000

Purpose: Phase II of this Small Business Innovation Research project will develop a fully functional Web-based planning and communications tool that will enable students with disabilities to direct the creation of their transition plans.

Method: Phase I established the feasibility and desirability of adapting an existing Web-based project management tool to meet the information needs of consumers (students with disabilities and their parents/guardians) and educational staff. Phase II will work to: 1) provide timely linkages between students with disabilities and their parents/guardians to community agencies that provide transition services and/or adult services; 2) expedite delivery of transition services, communications among service providers, and movement from one transition service to another related transition service; 3) inform students with disabilities, their parents/guardians, and teachers about available community resources during transition planning; 4) inform teachers and other school personnel about transition planning best practices; and 5) enable short-term resource planning and long-term transition services impact analysis.

Products: Phase II will result in a completed and piloted Individualized Career Planning and Preparation System (ICPPS) which students with disabilities can use to create transition plans that reflect their personal needs, goals, and dreams. The ICPPS will meet state educational agency and local school district requirements for data security and confidentiality, incorporate a high degree of input from students with disabilities and their parents, and provide a complete list of the services available from the major service providers of a service delivery region.

Contract Number: ED99PO4649

Development of Internet-Based Situational Evaluation Resource Tool (SERT) for Students with Learning Disabilities

Project Director: Christensen, Dean L.
CYBER Learning Corporation
1177 Rose Lane
St. Paul, MN 55112
612-628-0460

Purpose: In this Phase II Small Business Innovation Research project, CYBER Learning Corporation will develop and field test a functional prototype of the Situational Evaluation Resource Tool (SERT) designed in Phase I. SERT will provide a systematic process for the use of validated templates to determine which instructional media will meet the special needs of students with learning disabilities and support the requirements of families and professionals in rehabilitation and special education.

Method: The goal of Phase II is to meet the needs of school districts, students, their parents, and involved educators in using Internet instructional materials to improve learning for K-12 students with learning disabilities. Proof of concept for this project will be conducted with teachers whose classrooms include students with learning disabilities. The testing site will be a large urban school district. The Situational Evaluation Resource Tool will assist in planning for the acquisition and re-purposing of Internet instructional technology and media. It is anticipated that SERT would be connected to a database, accessible through an Internet site.

Products: Phase II of the project will apply this software application to the review and evaluation of instructional media, focusing on electronic networks and multimedia. The results would lead to the development of additional applications for individuals with disabilities, using a validated software approach.

Contract Number: ED99PO4884

**Schedule Assistant: A Portable Visual/Audio Prompting System for
Enhancing Independence and Self-Determination in Personal Scheduling
and Time Management for Individuals with Mental Retardation**

Project Director: Davies, Daniel K.
AbleLink Technologies, Inc.
1879 Austin Bluffs Parkway, Suite 100
Colorado Springs, CO 80918
719-592-0347

Purpose: Portable computer technology offers promising new approaches to reducing dependence on others for individuals with mental retardation. Phase I of this Small Business Innovation Research project investigated the utility of Schedule Assistant—a Windows CE-based portable schedule prompting system designed to increase independence and self-determination in time management for individuals with mental retardation. Phase II will build on the successful Phase I results to: 1) complete the Schedule Assistant prompting system, 2) build a companion desktop software utility to help set up and manage multiple Schedule Assistant schedules, and 3) perform expanded field testing of the system to evaluate its applicability for a wide range of activities of daily living and levels of disability.

Method: During Phase I the system requirements were identified and a “proof-of concept” prototype of the Schedule Assistant system was developed and tested. The results of the pilot study demonstrated strong support for the contention that such a device can effectively enhance independence for adults with mental retardation in personal scheduling and time management. Use of the Schedule Assistant prototype resulted in statistically significant improvements in schedule accuracy and increased independence when compared to a traditional scheduling approach for 12 subjects when performing a scheduled series of vocational and independent living tasks.

Products: Phase II will develop the full Schedule Assistant system for use on a variety of available Palmtop and handheld personal computers. By capitalizing on commercially produced portable PCs, Schedule Assistant will provide a much more cost-effective approach to providing portable independent living aids, because a single hardware unit will be able to operate a variety of independence applications built specifically for the Windows CE computer platform.

Contract Number: ED00CO0065

**Project Child-to-Child — A Project to Assist Children in
Classrooms to Communicate with Their Disabled Peers**

Project Director: Watkins, Sue

HOPE Inc.

1856 North 1200 East

North Logan, UT 84341

435-752-9533

Purpose: This Phase II Small Business Innovation Research project will develop and determine the feasibility of state-of-the-art materials that can be used by children in the classroom to assist them to comfortably and successfully communicate with their classmates who have disabilities. The materials will incorporate research-based content and innovative instructional design for children.

Method: During Phase I, one mediated unit was developed and evaluated to determine its feasibility and use with young children in classroom settings. Phase II will build on the development and field-testing done in Phase I and will result in a series of mediated units containing CD-ROM, video, print materials, discussion guides, and activity kits for use in classrooms by children and their teachers.

Products: Six mediated units with videotapes, CD-ROM, print materials, follow-up activity kits for children and discussion guides for teachers will be developed for use by children in K-4th grade. The units will be field tested to determine their effects on communication interactions between nondisabled children and their disabled peers, and then revised. The potential commercial application is the placement of a set of these materials in each classroom in the country that has a child with disabilities. Once the sets are in school classrooms, children without disabilities will team to communicate comfortably and successfully with their classmates who are disabled, thus enabling learning, interactions, and friendships between disabled and nondisabled children to grow and flourish.

Contract Number: ED00CO0069

**Web-based Training: Utilizing the Internet to
Deliver Self-Paced Training to Educators**

Project Director: Kraus, Lee

Kraus Communication LLC

1000 Technology Drive, Suite 1216

Fairmont, WV 26554

304-368-1730

Purpose: The goal of this Phase II Small Business Innovation Research project is to develop a curriculum of Web-based training courses for teachers of students with disabilities, create a Web-based learning portfolio tool that can be accessed by the participants, develop an e-commerce tool that will allow participants to pay for courses, develop an administrative tool for the management of participants, implement the Web-based courses for a six-month testing phase, and analyze performance data, including educators' attitudes toward Web-based learning and scores on assessment instruments.

Method: Phase II will be based on outcomes of Phase I, in which self-paced Web-based courses were administered to educators utilizing streaming technology. The courses will be delivered at TeacherWebTrainer.com, a prototype site offering Web-based training for educators to address the needs of students with disabilities.

Products: Phase II will result in a fully functioning Web-based curriculum of training courses that is ready for commercialization in Phase III, which will include the full launch of the Web site to state, regional, and national markets. The resulting system will offer a Web-based package of training courses to school districts and community organizations at a subscription rate that is a fraction of the cost of traditional training.

Contract Number: ED00CO0070

**On-line Delivery of a Blended Arithmetic
Curriculum for Special Education Students**

Project Director: Scipione, Don

Acme Express, Inc.
3821 Perkins Ave.
Cleveland, OH 44115
216-391-7400

Purpose: An online blended arithmetic curriculum called "Count Me Smart," encompassing both the constructivist methodology (where students discover their own understanding of the underlying principles of math) and back-to-basic methodology (where students learn basic facts and computational skills), will be developed and implemented to teach addition, subtraction, multiplication, and division in this Phase II Small Business Innovation Research project. Each "Count Me Smart" lesson consists of a constructivist conceptual lesson plan; a back-to-basics fluency-building worksheet that students complete independently at their seats or at home; and an online computer "game" that builds conceptual understanding and fact-retrieval fluency.

Method: Previous studies determined, and Phase I confirmed, that "Count Me Smart" helps special education students learn and perform addition well. In Phase II, "Count Me Smart" will be tested in three Cleveland Empowerment Zone elementary schools, grades 2-4. Phase II will further prototype, implement, and test the technology as applied to subtraction, multiplication, and division, and will address how to make the technology accessible and easy to use for young students and their teachers. Phase II will address the inclusion of special education students in regular classrooms and the integration of "Count Me Smart" in a practical way so that teachers fully embrace the technology.

Products: A successful Phase II will produce a sophisticated, simple-to-use, and inexpensive technology that engages special education students to learn math skills and is ready to market commercially. Because "Count Me Smart" is online and automated, it can be delivered in a cost-effective way to a wide range of customers.

Contract Number: ED00CO0076

**Music Touch: Adaptive Technology for Teaching
Music Braille and Musical Concepts**

Project Director: McCann, William R.

Dancing Dots Braille Music Technology, L.P.
1754 Quarry Lane, PO Box 927
Valley Forge, PA 19482-0927
610-783-6692

Purpose: This Phase II Small Business Innovation Research project will develop and organize a comprehensive, multimedia curriculum for teaching music braille. The system will permit teachers with little or no knowledge of music braille to instruct students in its use. Sighted teachers see and hear material to be taught, while blind students feel and hear the same material. The sound becomes the common denominator for communicating. Teachers use what they know (print notation and musical concepts) to teach what they and their students do not yet know—the expression of these concepts in music braille.

Method: Hardware and software components will be built on the Phase I foundation. Curriculum materials will be published in print and braille. Multimedia content will be presented on one or more touch-sensitive hardware devices via newly developed software functions.

Products: The project will result in a multimedia teaching system for music braille, which can be marketed to schools, training centers, and private teachers who serve blind musicians.

Contract Number: ED00CO0077

Disabled Teen E-Zine

Project Director: Stein, Linda M.
Disability Central
564 South Richmond Ave.
Carson City, NV 89705
775-884-1127

Purpose: This Phase II Small Business Innovation Research project will hire teens with disabilities to create a disabled teen e-zine on the Internet. The e-zine will enable the disabled teens to develop an online community to offer support, education, and entertainment to one another.

Method: The target population of this proposal is disabled teenagers from the ages of 14 to 19 years old. The content and themes of the e-zine will be determined by a staff of 15 disabled teenagers. They will also be responsible for hosting the associated chat room and for interfacing with the Web designer to develop a fully accessible e-zine format. Marketing and sales staff will seek out and secure advertisers for the e-zine, thereby ensuring salaries and continued publication. A project manager and a Web designer will be available to consult with the staff to assist them in determining appropriate layouts of the e-zine, timely articles, and interesting columns.

Products: This project will result in an increased presence on the Internet by teens with disabilities. It is anticipated that this e-zine will meet with great enthusiasm among disabled teens and parent groups, with a subscription rate up to a thousand by the end of the second year. Commercial applications of this project include increased business activity on the Web that would offer more job opportunities to people with disabilities who might otherwise be unable to work.

Contract Number: ED00CO0664

CD-ROM of Visually Represented Songs for Young Deaf Children

Project Director: Vinopol, Corinne K.
Institute for Disabilities Research and Training, Inc.
2424 University Blvd. West
Silver Spring, MD 20902
301-942-4326

Purpose: Music is an important part of social development for young children and has proven to contribute to mathematic, linguistic, and motor development. Deaf children are not privy to the nursery rhymes and songs that hearing children learn as a part of American culture. This Phase II Small Business Innovation Research project will develop three CD-ROMs for young deaf children, each containing a well-known song that has multiple verses.

Method: The songs chosen will use techniques that foster early reading and linguistic skills (e.g., cumulative story, repeated phrases, consecutive events). The story/concept, volume, notes, and rhythm of the songs will be

depicted through graphic representations of each of these aspects, and through analysis and coordination with each other. Text from the songs will follow graphic changes. The child will have the option of viewing video-clips of the song signed in English word order or in an American Sign Language (ASL) version with explanation. An interpreter dressed as Paws, the signing dog (a lead character for other preschool CD-ROM materials), will be filmed for this purpose.

Products: Phase II of this project will result in the complete development of three CD-ROMs that impart the story/concept, volume, notes, and rhythm of traditional, early childhood songs to deaf children, along with ASL translations and word-for-word depictions synchronized to the music. Each CD-ROM will contain a song that has multiple verses and reinforces early reading and linguistic skills. Advertising and distribution arrangements, will be established at the conclusion of Phase II.

Contract Number: ED00PO3594

An American Sign Language Clip-Art CD-ROM

Project Director: Vinopol, Corinne K.
Institute for Disabilities Research and Training, Inc.
2424 University Blvd., West
Silver Spring, MD 20902
301-942-4326

Purpose: This Phase I Small Business Innovation Research project will create a CD-ROM that contains clip-art of approximately 100 American Sign Language (ASL) signs; graphics and English text that relate to those signs; instructional activities that afford deaf children opportunities for using the clip-art creatively while learning valuable linguistic and developmental skills; and templates for handouts that teachers can customize and print to support vocabulary and concepts.

Method: The CD-ROM will help teachers of the deaf to develop instructional materials containing pictures of signs. The clip-art will be used by teachers of deaf children, and by hearing children and adults who wish to learn ASL, to create their own instructional materials, such as "theme" dictionaries. The project will build upon drawings of signs generated in other SBIR projects.

Products: Phase I will result in a CD-ROM that demonstrates the feasibility of producing a CD-ROM series of clip-art that can be used by teachers to design instructional materials with pictures of ASL signs or by children to make their own products and play educational games that reinforce linguistic and developmental concepts related to the signs. One hundred signs, four instructional activities, and ten instructional handouts will be developed in Phase I to demonstrate feasibility of this concept. In Phase II, a CD-ROM will be developed that includes 2,000 signs, 15 instructional activities, and 30 handouts. The Institute will market the CD-ROM series through its catalog and retail distributors, conduct direct mailings, present the information at conventions, place press releases and articles in journals, distribute samples to resource centers and libraries, and issue information through the Internet.

Contract Number: ED00PO3613

Using Virtual Reality to Increase the Success of Middle School Age Students with Emotional and Behavioral Disabilities in Educational Settings through Training in Social Problem-Solving and Communication Skills

Project Director: Lovett, Charles S.; Lovett, Barbara M.

NBLC, Inc.

3013 Kings Harbour Road

Panama City, FL 32405

850-769-0650

Purpose: Children who are emotionally disturbed are often disliked, as they are viewed by others as being mean, bad, angry, or uncooperative. This perception of them by others influences other's behavior towards them. Acquiring good social problem-solving skills and having the ability to communicate effectively are recognized resiliency factors for at-risk youth. This Phase I Small Business Innovation Research project will use Virtual Reality to increase the success of middle-school age students with emotional and behavioral disabilities by training them in social problem-solving and communication skills.

Products: The research and development effort will result in a training program that will teach social problem-solving (including anger management and conflict resolution) and effective nonverbal and verbal communication skills to students with emotional and behavioral disabilities. The Phase I effort will provide the foundation for the construction of a training program that can be implemented in the Phase II effort. Virtual Reality technologies will provide a superior way for obtaining this training without students' fear of failure or embarrassment.

Contract Number: ED00PO3619

Memory and Organization Devices - Use, Simulation, Exploration

Project Director: Fleming, Jo

ORCCA Technology, Inc.

462 East High Street

Lexington, KY 40507

606-226-9625

Purpose: This Phase I Small Business Innovation Research project will develop an interactive multimedia program that will provide a decision-support system for selection and implementation of assistive technology for memory and organization tasks. It will incorporate a questioning procedure employing responses from the user to guide the decision-making process to match assistive technology products with characteristics of the task, environment, and user. From a list of potentially useful products, the user can interact with age-appropriate case scenarios depicting real people using devices and interact with the products in a three-dimensional simulated environment to determine appropriateness. The program will provide strategies for implementation of the devices and will print tips and techniques. The World Wide Web will be used as the base for information, updates, and interaction with successful users.

Method: Eight specific activities will be accomplished: 1) develop the content outline for the complete decision support system; 2) develop the questioning procedure for the prototype; 3) verify and validate the questioning procedure for the prototype; 4) create the architecture following a decision support system design; 5) create the multimedia elements for the prototype; 6) program the prototype; 7) evaluate the prototype; and, 8) develop a plan for commercial distribution.

Products: The program will provide information and training on the topic of assistive technology for memory and organization to four main audiences: 1) children, youth, and young adults (ages 8-21) who are experiencing

problems with memory and organization; 2) family members and caregivers of students with memory and organization problems; 3) professionals who work with individuals who exhibit problems with memory and organization; and 4) students in university programs and personnel in educational, social, government and medical facilities who are preparing to work with children and youth with memory and organization problems. The final product will be distributed on CD-ROM or DVD-ROM with a World Wide Web component.

Contract Number: ED00PO3947

Speech-to-Print-to-Sign System

Project Director: Vinopol, Corinne K.

Institute for Disabilities Research and Training, Inc.

2424 University Blvd., West

Silver Spring, MD 20902

301-942-4326

Purpose: Many deaf people do not have a good command of English and find the written English produced from speech-to-text technology difficult to follow. Many of these individuals use American Sign Language (ASL), which has a different grammar and syntax from English and no written representation. This Phase I Small Business Innovation Research project will develop a system for translating speech into signs.

Method: The project will be based on research in: 1) the application of speech recognition technology to the needs of deaf people, and 2) the development of a sign language dictionary that allows an individual to identify words through ASL without knowing the English equivalent, using sign parameters. Sign parameters will be used to control three-dimensional (3D) animation. By using animation (as opposed to video), real-time, fluid conversation can be generated in a signed English format. The resulting software will create a system for producing: Speech -> English Text -> Sign parameters -> 3D animation of signs.

Products: Phase I will demonstrate the feasibility of this model using 20 signs. Phase II will result in capability to use the system with any sign. This system will enable an individual to speak into a computer and instantly generate real-time seamless signing in three dimensions.

Contract Number: HS96013001

Institute to Improve the Quality of Technology, Educational Media, and Materials for Individuals with Disabilities

Project Director: Carmine, Douglas

University of Oregon

National Ctr to Improve Tools of Educators

Inst for Development of Educ Achievement

5219 University of Oregon

Eugene, OR 97403-5219

541-346-5131

Fax Number: 541-683-7543

Beginning Date: 9/30/96

Ending Date: 9/29/01

Purpose: To apply national leadership and achieve widespread, long-term, and systemic changes that will improve the quality and effectiveness of technology, educational media, and materials (TMM) for individuals with disabilities. To encourage the appropriate development of TMM and inform decision makers about the acquisition and use of TMM to enhance outcomes for students with disabilities.

Method: The Institute will build a network of partnerships to support quality TMM and their appropriate use, create an infrastructure for developing and using quality TMM, and implement the infrastructure to build

capacity for developing and using quality TMM. These goals will be realized through partnerships with governmental groups, the education profession, and external groups. The Institute will use a social marketing approach to recruit new partners and to educate the public and decision makers. Additional approaches will include introducing incentives for development and use of TMM; influencing revisions in the adoption process; and increasing capacity regarding TMM for publishers, end users, and researchers.

Products: Products will include: (1) prototype content standards prepared for California; (2) a research review of experimental studies of pedagogy in mathematics and reading; (3) procedures for consolidating, refining, and field-testing a model for identifying quality TMM and its appropriate use; and (4) procedures for consolidating, refining, and field-testing a model for identifying replicable high performing schools that appropriately use an array of quality TMM. Other products will be developed in conjunction with NCITE partners.

Contract Number: HS97022001

**Center to Link Local School Districts with Information and Support on
the Use of Technology, Educational Media, and Materials**

Project Director: Zorfass, Judith
Education Development Center, Inc.
55 Chapel Street
Newton, MA 02158-1060

Beginning Date: 9/30/97
Ending Date: 9/29/02

Purpose: The goal of the Center to Link Local School Districts with Information and Support on the Use of Technology, Educational Media, and Materials (TMM) is to connect urban schools districts to available and relevant information and support on the effective use of TMM to: identify their needs and formulate plans based on those needs; access information and support in a coherent way that is closely aligned to those needs and plans; and develop the capacity to monitor, document, and evaluate the outcomes.

Method: The Center will first identify and assemble all of the entities that can provide relevant information and support to the school districts: a community-based resource group, a national resource bank of experts, and Dept. of Education-supported projects that provide training, technical assistance, materials, and resources. Second, the Center will create mechanisms and processes that identify the information and coordination with the needs of the sites.

Products: Center staff will: help design tools and procedures to carry out needs assessments and guide urban districts in forming action plans; utilize effective strategies to identify available and relevant information and support; create new information and support opportunities when needed; facilitate the development of a comprehensive plan to ensure that each district has access to necessary information and support, either within its district or in cross-district venues; create a blueprint to document all information and support activities, describe their impact, and share lessons learned with the wider field; guide districts to monitor and evaluate their own work and the work of the Center.

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